

NOVEMBER 2023

THE LEADING MAGAZINE FOR ENDOCRINOLOGISTS

Endocrine news

Dimensions IN DIABETES

To commemorate National Diabetes Awareness Month, *Endocrine News* focuses on the vital role endocrinologists continue to play in the research and treatment of diabetes.

GOOD SPORTS:

A new book co-authored by Rita R. Kalyani, MD, MHS, spotlights athletes thriving with diabetes.

PASSAGE TO INDIA:

Estelle M. Everett, MD, MHS, on the Dimensions in Diabetes program and more.

● SAGE ADVICE:

A new decision support tool from the Endocrine Society could help reduce hypoglycemia in older adults with diabetes.

● PHARM FRESH:

How could pharmacological solutions play a role in delaying or even preventing diabetes?

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Hormone Science to Health



Advancing Diabetes Research and Care with Digital Education and Knowledge Sharing

“
As a community, we can leverage advances in diabetes research and clinical care to improve the lives of the patients and families who need them the most. As we mark Diabetes Awareness Month, I find myself in awe of our members' many contributions in the diabetes realm.
”

More than 100 years after the discovery of insulin galvanized our field, diabetes research and care remain a central part of endocrinology. Diabetes Awareness Month offers the opportunity to reflect on the importance of our research and clinical care to millions of people around the globe.

For the 540 million people worldwide living with diabetes, breakthroughs in research and treatment can lead to concrete improvements in outcomes and quality of life. I am proud of the many resources the Society provides to help diabetes researchers and clinicians excel.

To provide the latest information on diabetes pharmacotherapy management, we created a virtual cohort class for clinicians to learn in a small group environment. Thirty clinicians were invited to the first cohort, “Mastering Pharmacotherapy Management of Type 2 Diabetes,” which took place this summer. Participants discussed prerecorded lectures during live virtual, case-based sessions and via an online discussion board. Later this year, case-based course modules on the evolving role of the endocrinologist in type 2 diabetes pharmacotherapy management, managing cardiovascular risks, newer pharmacotherapies, and diabetes and obesity will be offered more widely in our Center for Learning.

We offer a variety of diabetes educational content that you can access at your convenience from anywhere in the world, including recordings of Clinical Endocrinology Update 2023 and **ENDO 2023** sessions on topics such as beta cell autophagy and insulin secretion. Our webinars cover important topics such as how diabetes technology can help address healthcare disparities. I encourage you to browse our Center for Learning for topics that interest you.

We also work to bring diabetes education to members around the world. In August, we held our ninth annual Dimensions in Diabetes event in Mumbai, India. This event, held in conjunction with Mediquest, gives hundreds of clinicians in India an opportunity to interact with world-renowned faculty members on important diabetes topics, such as preservation of kidney function and management of complications in a pediatric population. In fact, on page 14 you will see *Endocrine News* Executive Editor Mark A. Newman's interview with Estelle M. Everett, MD, MPH, who goes into detail


about this program when she was a member of the Dimensions in Diabetes 2023 faculty in August.

Whenever you want to consult a group of peers about a diabetes topic, our secure online medical collaborative community, DocMatter, provides a venue to pose questions or share cases. Members have discussed diverse topics like the use of statins in type 1 diabetes and atherosclerotic cardiovascular disease risk in our community. I enjoy seeing the knowledge sharing and interaction between our members on this platform.

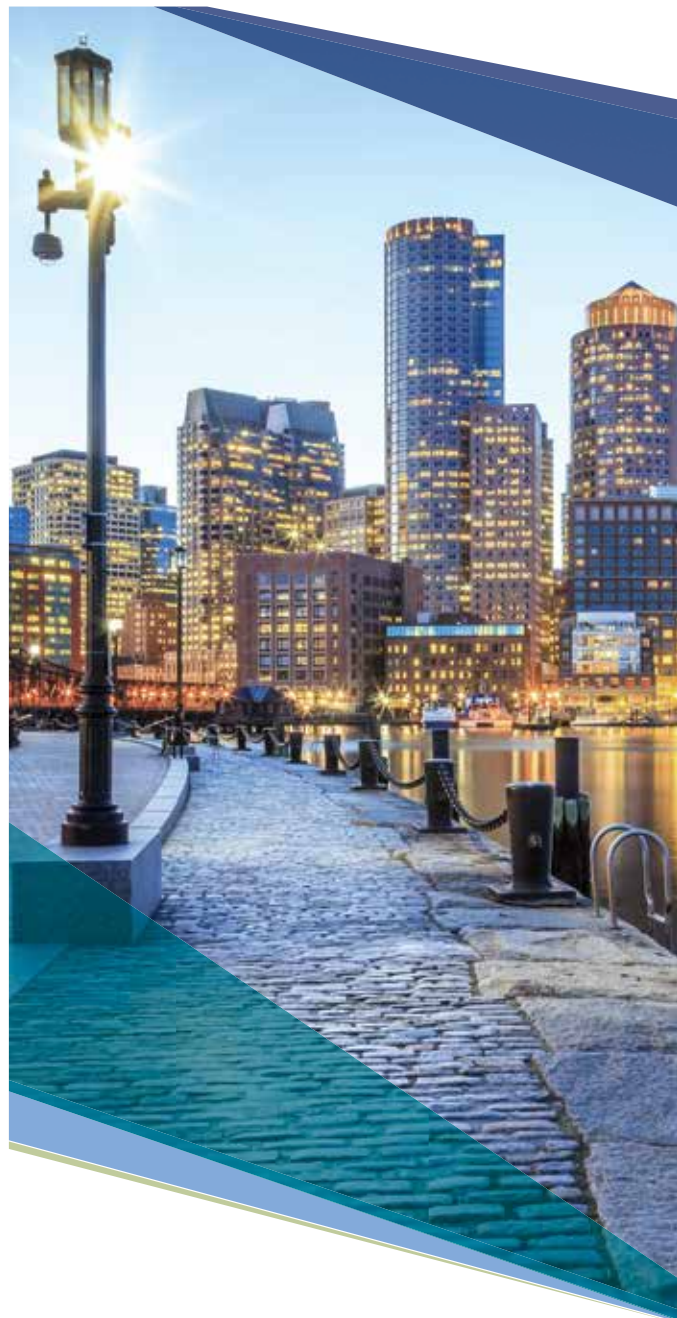
Our Endocrine Feedback Loop podcast gives you a chance to listen to speakers delve into journal articles. Recent episodes have explored how type 1 diabetes affects pancreas size and the glycemic gap in hospitalized patients with COVID-19.

The Society's peer-reviewed journals curated important diabetes research in a special thematic issue. Articles in the diabetes thematic issue examine topics such as enhanced endosomal signaling and desensitization of GLP-1R in rat pancreatic beta cells as well as progress toward a type 1 diabetes treatment using the implantation of stem cell-derived islets.

Our members are having a real-world impact on diabetes treatment and research. The Hypoglycemia Prevention Initiative, a partnership between the Society and Avalere Health, developed a low-cost clinical support decision tool to help primary care providers minimize the impact of hypoglycemia among patients ages 65 and older. The results of the HypoPrevent quality improvement study were published in the *Journal of the American Geriatrics Society* in September, paving the way for more widespread adoption of the clinical support decision tool. (On page 24, regular *Endocrine News* contributor Eric Seaborg describes this article, as well as this new initiative.)

As a community, we can leverage advances in diabetes research and clinical care to improve the lives of the patients and families who need them the most. As we mark Diabetes Awareness Month, I find myself in awe of our members' many contributions in the diabetes realm. 

Stephen R. Hammes, MD, PhD
President, Endocrine Society



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FROM THE **EDITOR**

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Looking at the Many Dimensions of Diabetes

As the weather in the Washington, D.C., area starts ebbing from shorts and T-shirts to jeans and hoodies, autumn signals its arrival and therefore, the focus of *Endocrine News* turns to our annual diabetes research and practice issue each November, to coincide with Diabetes Awareness Month. As usual, thanks to the plethora of research on this topic, we have another packed issue for you.

A new clinical support tool has been developed by the Endocrine Society and was created to help primary care physicians avoid overtreatment in their older adult patients with type 2 diabetes that could result in hypoglycemia. The Hypoglycemia Prevention Initiative is a multi-year joint effort between the Society and Avalere Health and resulted in the “Hypoglycemia Reduction Clinical Decision Support Tool” based on the literature, including Endocrine Society clinical practice guidelines on treating diabetes in older adults and managing patients at high risk for hypoglycemia, as well as American Diabetes Association care standards. On page 24, Eric Seaborg discusses this new tool in “**Sage Advice**” and why it was so important for primary care providers to have this as a resource.

Treating people with type 2 diabetes is also the topic of “**Pharm Fresh**” on page 20 by senior editor Derek Bagley, who goes into great detail about the potential of pharmacological solutions in preventing diabetes. While clinicians have maintained that this condition could be curtailed or at least delayed by modifying various risk factors, Priyanka Majety, MD, assistant professor in the Division of Endocrinology, Diabetes, and Metabolism at Virginia Commonwealth University in Richmond, states that she is thankful for the number of pharmacological options available for patients with type 2 diabetes, but that using patient-specific characteristics are key to direct the treatment strategies that are most effective because “this will ensure success for both us and our patients,” she says. “We consider the type of diabetes they have, their lifestyle, their comorbid conditions, and complications (heart disease, high blood pressure, kidney disease, hyperlipidemia, etc.) before choosing a medication.”

Rita R. Kalyani, MD, MHS, an associate professor of medicine at Johns Hopkins University School of Medicine in Baltimore, Md., talked to Derek about her recent book *Winning with Diabetes: Inspiring Stories from Athletes to Help You Thrive* that she hopes clinicians can use with their patients with diabetes as a source of inspiration. In “**Good Sports**” on page 28, she goes



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into great detail about how the book doesn't shy away from the very real challenges a number of professional athletes have faced in overcoming the odds that diabetes often complicates while still achieving their own athletic goals.

Kalyani discusses how she really sought to understand how these athletes were so successful professionally despite living with diabetes. She says that she found in nearly all cases is that most of the athletes thought they “were successful in part due to the lessons they learned from an early age living with a chronic disease such as diabetes,” adding that it taught them self-care practices, healthy eating, and gave them the maturity and determination that they needed to succeed.

I'm glad to say that the new department we launched earlier this year, “Early Career Corner,” has become a very popular addition to our portfolio as we seem to have a major article in every issue! This month features the article “**Passage to India**” on page 14, where I talked with Estelle M. Everett, MD, MHS, from the David Geffen School of Medicine at UCLA in Los Angeles, Calif., about her participation in the Dimensions in Diabetes program that took place in Mumbai, India, in August. Sponsored by the Endocrine Society and CME Mediquest, this is the event's ninth year, and Everett conducted a session entitled “Type 2 Diabetes Management: Intensifying Treatment for Optimal Glycemic Control,” that focused on the phenomenon of clinical inertia, “which occurs when there is failure to intensify one treatment regimen despite suboptimal glycemic control,” she says. “This is an issue that occurs all over the world, including in India.” Aside from telling us more about this important international program, Everett also discusses the impact that receiving an Endocrine Society 2022 Early Investigator Award has had on her career and her research.

As we get ready to gear up for 2024, feel free to contact me regarding any story ideas or outstanding Endocrine Society members you think we should feature on our pages. You can find me at: mnewman@endocrine.org 

— **Mark A. Newman**, Executive Editor, *Endocrine News*



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Felix Beuschlein Receives 2024 Transatlantic Alliance Award in Endocrinology



Professor Felix Beuschlein, MD

The European Society of Endocrinology (ESE) and the Endocrine Society are delighted to announce that they have awarded the 2024 Transatlantic Alliance Award to Professor Felix Beuschlein, MD.

Beuschlein is professor of internal medicine/endocrinology and director of the Clinic for Endocrinology, Diabetology, and Clinical Nutrition at the University Clinic Zurich in Switzerland. He received his medical degree from the School of Medicine at the University of Würzburg and completed his medical training in Freiburg, both in Germany. For postdoctoral studies, he attended the University of Michigan in Ann Arbor. Following a professorship for endocrine research at the University of Munich, he was elected for a chair position at the University of Zurich in 2017.

The Transatlantic Alliance Award, which was launched in 2021, recognizes an international leader who has made significant advancements in endocrine research on both sides of the Atlantic — in Europe and the United States.

Beuschlein has received this prestigious award in recognition of his transformational endocrine research and the impact of this research in the field of adrenal tumors. Through his collaborative approach across the European Network for the Study of Adrenal Tumors (ENS@T) with colleagues from the American Australasian Asian Adrenal Alliance (A5), he has fostered the transformation of knowledge and understanding of adrenal tumors and unlocked true transatlantic collaboration.

“Felix Beuschlein has been instrumental in driving research forward in the adrenal tumor field, and he has demonstrated what can be achieved when collaborating with colleagues across Europe and across the Atlantic,” says ESE President Professor Jérôme Bertherat, adding, “We are delighted to recognize his sizable contribution to endocrinology and the many committees he has been involved with.”

“This award honors Felix Beuschlein’s excellence in leadership, his lifetime achievement in teaching and research, and his outstanding contributions to the field of endocrinology,” says Endocrine Society President Stephen Hammes, MD, PhD. “In addition to his dedication to advancing adrenal tumor research, Dr. Beuschlein has paved the way for international exchange between fellow endocrine researchers and clinicians, both as the chair of our annual meeting in 2021, and as an associate editor of our flagship clinical research journal *The Journal of Clinical Endocrinology & Metabolism*. He is truly a worthy recipient of this award.”

Beuschlein’s scientific interests mainly relate to adrenal disorders and endocrine tumors. He has authored more than 460 publications in high-ranking international journals and has received many awards, including the *European Journal of Endocrinology* Prize and the Society for Endocrinology (UK) European Medal. He has organized several scientific meetings and has co-chaired the program organizing committee for a European Congress of Endocrinology (ECE) meeting and served as head of the annual meeting steering committee of ENDO 2021. As a strong believer in the value of scientific and clinical networking, Beuschlein has been involved in numerous national and international

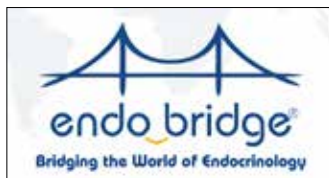
approaches, including coordination of the ENS@T-CANCER Consortium and participation in a number of European and international programs.

He has served on several boards including the Annual Meeting Steering Committee of the Endocrine Society, the Executive Committee of the Swiss Endocrine Society and has been the vice president of the German Endocrine Society. He has been a founding member, Steering Committee member, and chairman of ENS@T.

“I am deeply moved to be this year’s recipient of the Transatlantic Alliance Award. As a strong believer in the power of international collaborations, this award comes as a particular honor as it signifies the connection of the international endocrine community through science and clinical care,” Beuschlein says. “The award reflects also more than personal achievement but rather a broad array of dedicated individuals — mentors who have guided me, colleagues with whom I share the dedication in endocrine research, and the next generation of students and researchers who bring fresh perspectives and renewed energy. I am obliged to both societies and applaud their common spirit to pushing the frontiers of endocrinology for the betterment of patient care worldwide.”

Beuschlein will present his award lecture at ECE, the 26th European Congress of Endocrinology, which will take place from May 11 to 14, 2024, in Stockholm, Sweden. He will also speak at the Endocrine Society’s annual meeting, **ENDO 2024**, which will take place from June 1 to 4, 2024, in Boston, Mass.

Nominations for the 2025 Transatlantic Alliance Award will open later this year.



EndoBridge Held Its 11th Meeting in Turkey

In its eleventh year of “bridging the world of endocrinology,” EndoBridge 2023 brought together global leaders of endocrinology and welcomed more than 450 delegates from 40 countries from October 19 to 23 in Antalya, Turkey.

As in previous years, the meeting was held in English with simultaneous translation into Russian, Arabic, and Turkish. Accredited by the European Council, the three-day scientific program included state-of-the-art lectures and interactive case discussion sessions covering all aspects of endocrinology and metabolism. The abstracts of



clinical cases presented by the delegates in oral and poster sessions will be published as a supplement of the Endocrine Society’s newest journal, *JCEM Case Reports*.

“Starting from this year, the Pediatric Endocrine Society and the European Association for the Study of Obesity have joined us at the Bridge. We truly appreciate growing intercontinental collaboration for bridging the world of hormones,” says Bulent O. Yildiz, MD, a faculty member at Hacettepe University School of Medicine in Ankara and the founder and president of EndoBridge®. “I am thrilled to witness how EndoBridge has become one of the highlights of the year and continues to be a unique and highly influential model enhancing cross-cultural dialogue, understanding, and collaboration beyond national borders.”

The 12th annual EndoBridge® will take place in Antalya, Turkey, October 17 – 20, 2024. Further information can be found at: www.endobridge.org.



BY DEREK BAGLEY
Senior Editor



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We continue to try to iterate and make this simpler, make the workflows better with the context of patient safety, which is always paramount. We believe we designed these things like transitions that'll make those processes easiers.

”

Software Company Simplifies Glycemic Management for Clinicians and Pharmacists

In August, the insulin management software company Glytec unveiled the latest version of its Glucommander insulin dosing software to make it easier for providers, nurses, and pharmacists to offer optimal, personalized care. More than 300 hospitals in the U.S. use Glytec's eGlycemic Management System® (eGMS®) for glycemic management for their patients.

Glytec Chief Medical Officer Jordan Messler, MD, tells *Endocrine News* that there were three key areas in which the company is trying to improve glycemic management. The first is streamlining the transition from intravenous insulin to subcutaneous insulin. “We have a transition module, and that's one key area that we've made improvements for — trying to be more transparent with the information, making the process smoother for nurses and physicians, and getting more information to the physicians and the pharmacists,” he says.

The next is improving hypoglycemia management by expanding medication options for pharmacists with dextrose 10% (D10) for when there are shortages of D50. “There have been some shortages of D50, so sites have used D10, and we've just enhanced the way we can present that information to sites. We've made it easier,” Messler says. “That's improved management of hypoglycemia with D10, particularly because we've updated some of our recommendations for hypoglycemia management with oral carbohydrates based on research.”

Finally, Messler says they focused on making electronic health records and site integration as

smooth as possible for physicians and nurses. “One of our goals over the last few years is to improve the integrations that we have with sites,” he says. “The electronic health record, making it more seamless, really trying to help the end-users, the front-line nurses and physicians. We've been trying to improve that order set design, the ways that we integrate, and make the ordering of [the new software] as easy as possible.”

Messler says that the goal is to make treating diabetes simpler for the front-line staff, to free up their cognitive load when managing insulin, especially in a setting like an intensive care unit. “We continue to try to iterate and make this simpler, make the workflows better with the context of patient safety, which is always paramount. We believe we designed these things like transitions that'll make those processes easier,” he says.

This updated system is still young, but Messler says he expects positive results, from providers and patients, and he hopes responses will shape future developments. “We expect to hear that feedback and continue to find ways to improve the workflow for nursing, for physicians — improve it in such a way that they feel confident in the dosing so that with their sites that don't have endocrinology support or don't have all those diabetes education specialists, that they'll feel confident in the management,” he says.

Children with Prediabetes and Obesity May Be More Likely to Progress to Diabetes

A new *Journal of the Endocrine Society* study highlights how to identify children at high risk of developing type 2 diabetes and strategies for prevention, such as anti-obesity or anti-diabetes medication and lifestyle changes.

Researchers led by author Ashley H. Shoemaker, MD, MSCI, of Vanderbilt University Medical Center in Nashville, Tenn., point out that over the past three decades, there has been a sharp increase in the incidence and prevalence of childhood obesity, prediabetes, and type 2 diabetes. At least one in five adolescents are estimated to have prediabetes. It is not clear whether the adult definition of prediabetes is appropriate for children as fewer progress to diabetes during childhood.

“It is recognized that age of diagnosis is inversely associated with increased morbidity and mortality from type 2 diabetes,” the authors write. “Strategies are needed to better identify at-risk children who could benefit from longitudinal follow-up and early intervention to slow or stop progression to type 2 diabetes. Earlier diagnosis of type 2 diabetes may also decrease initial treatment burden. To recognize children at risk of type 2 diabetes, it is crucial to identify the factors that contribute to disease progression from prediabetes.”

“We found that higher levels on certain diabetes screening tests (non-fasting glucose and hemoglobin A1c) and worsening obesity may better predict diabetes risk in children,” Shoemaker says. “This is a real-world study that highlights ways to identify the children at highest risk for diabetes and possible strategies for

diabetes prevention in children, such as treatment with anti-diabetes or anti-obesity medications. Our study found patients who were on metformin had lower blood sugar levels and were slower to progress to diabetes.”

The researchers found 6.5% of 552 pediatric patients with prediabetes developed type 2 diabetes over the seven-year period of their



study. They identified a few risk factors, including higher HbA1C and non-fasting glucose levels, and worsening obesity. The study found boys progressed more commonly and more quickly to type 2 diabetes than girls. “Preventing further worsening of obesity is an important intervention for type 2 diabetes prevention in children, and metformin may have a role in the management of pediatric prediabetes,” the authors write in their conclusion.

“Weight stabilization and metformin therapy could be important interventions for diabetes prevention in children,” Shoemaker says.



“

This is a real-world study that highlights ways to identify the children at highest risk for diabetes and possible strategies for diabetes prevention in children, such as treatment with anti-diabetes or anti-obesity medications.

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This analysis showed that it was possible to maintain consistent height SDS improvements in children and adolescents in Tanner Stages 3 – 5 without an increase in the mean lonapegsomatropin dose.

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Lonapegsomatropin Provides Height Improvements in Later Tanner Stages without Increase in Dose

Lonapegsomatropin, a once-weekly prodrug of somatropin, can help children in Tanner Stages 3 – 5 maintain consistent height standard deviation scores (SDS) without an increase in the mean dose, according to a study presented at ENDO 2023. Ascendis Pharma is marketing the drug as TransCon hGH.

Researchers led by Paul Hofman, MD, FRACP, of the Liggins Institute and the University of Auckland in New Zealand, point out that many pediatric endocrinologists advocate increasing growth hormone doses in later puberty to mimic normal adolescent physiology and maximize growth outcomes. The researchers analyzed outcomes from three Phase 3 trials investigating the safety and efficacy of lonapegsomatropin — the heiGHt (treatment-naïve trial), the fliGHt (switch trial), and the enliGHten (open-label extension trial). “The enliGHten open-label extension trial of once-weekly lonapegsomatropin provided the opportunity to evaluate dosing, efficacy, and safety outcomes in a group of children that includes more advanced Tanner Stages,” the authors write.

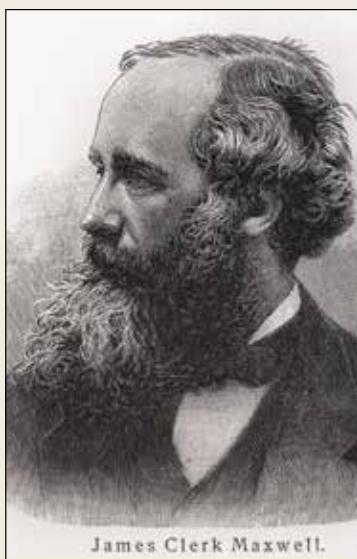
For this study, the researchers examined the association between Tanner Stage and IGF-1 SDS measurements, lonapegsomatropin dose, and height SDS using mixed repeated models with the Tanner Stage as the time-varying covariate. They found that later Tanner Stages (3 – 5) were correlated with higher average IGF-1 SDS, compared to lower Tanner Stages (1 – 2). Adolescents in Tanner Stages 4 and 5 received the lowest mean dose. “Among patients with dose reduction, a decrease of lonapegsomatropin of 0.02 mg hGH/kg corresponded to a consistent drop in average IGF-1 SDS across all Tanner Stages,” the authors write. “Participants across all subgroups experienced continued growth as expected over time.”

“This analysis showed that it was possible to maintain consistent height SDS improvements in children and adolescents in Tanner Stages 3 – 5 without an increase in the mean lonapegsomatropin dose,” the authors conclude. “Lonapegsomatropin dose reductions resulted in predictable linear IGF-1 decreases across Tanner Stages.” ^{EN}



“ Primary care and endocrine healthcare providers see a significant number of older individuals with diabetes that are at high risk for hypoglycemia. We need better means for quickly identifying those patients and for reducing their risk for hypoglycemia by appropriately adjusting their glycemic goals and avoiding overtreatment. **The results from this study demonstrate that an easy-to-use clinical decision support tool can help providers to do just that and can improve patient-reported outcomes as well.**”

— David C. Lieb, MD, professor of endocrinology and diabetes at Eastern Virginia Medical School, in “Sage Advice” on page 24, where he comments on the Endocrine Society’s “Hypoglycemia Reduction Clinical Decision Support Tool,” and co-chaired the committee that wrote “Management of Individuals with Diabetes at High Risk for Hypoglycemia: An Endocrine Society Clinical Practice Guideline”



“THE PURSUIT OF SCIENCE IS A GRAND ADVENTURE DRIVEN BY CURIOSITY, FUELED BY PASSION, AND GUIDED BY REASON.”

— JAMES CLERK MAXWELL, SCOTTISH PHYSICIST (1831 – 1879)

The percentage of endocrinologists who say that they are either very happy (50%) or somewhat happy (37%) outside of work. In this June 2023 poll by Doximity, the only specialties to rank higher than endocrinologists were: allergy and immunology and orthopedics (both at 89%), and plastic surgery at 92%.

— SOURCE: DOXIMITY



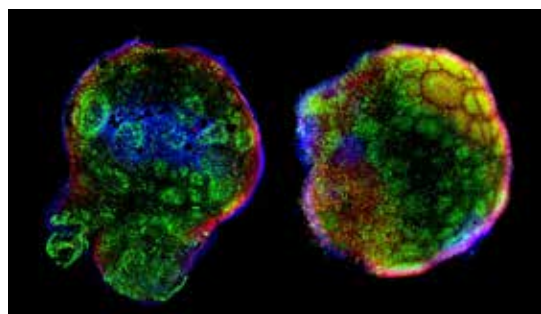
Number of Americans who have low bone density or osteoporosis. In fact, about one in two women and up to one in four men older than the age of 50 will break a bone due to osteoporosis.

— SOURCE: BONE HEALTH & OSTEOPOROSIS FOUNDATION

1 Billion

Number of adults worldwide predicted to be overweight or obese by 2030.

— SOURCE: WORLD HEALTH ORGANIZATION



Endocrine Image of the Month

From the Endocrine Society’s 2023 Endocrine Images Art Competition, this image shows that the thyroid hormone transporter MCT8 plays a role in early brain development. According to Federico Salas-Lucia, a postdoctoral scholar at the University of Chicago, “When a brain organoid is generated from a patient with a mutation in the MCT8 gene (left), its neural progenitors (green) and proliferative cells (red), are compromised and fail to generate neuroepithelium-like structures. However, when the mutation is corrected by CRISPR/Cas9 (right), the phenotype is rescued.”

ENDO 2023

June 1 – 4, 2024 • Boston, Mass.



We hope to see you at **ENDO 2024**, taking place June 1 – 4, 2024, in Boston, Mass. With over 7,000 attendees, nearly 2,000 abstracts, and over 200 other sessions, **ENDO** is the top global meeting on endocrinology research and clinical care. **ENDO** provides the opportunity to collaborate with an unparalleled list of endocrinologists, healthcare practitioners, and leading scientists from around the world. Through sharing our experience, advice on patient care, and new advances in research, we move the needle forward in hormone health and science. Our outstanding slate of world-renowned speakers will showcase the most cutting-edge advances in research and medicine, with presentations spanning the spectrum of science, clinical care, and social implications. <https://www.endocrine.org/meetings-and-events/endo-2024>

4th Annual Mayo Clinic Thyroid and Parathyroid Disorders Course 2023

Orlando, Florida
November 9 – 11, 2023



The 4th Annual Mayo Clinic Thyroid and Parathyroid Disorders Course 2023 is a three-day CME course offering a comprehensive review of diagnostic techniques and medical and surgical management of thyroid and parathyroid disorders.

<https://ce.mayo.edu/endocrinology/>

Neuroscience 2023 – Society for Neuroscience (SfN)

Washington, D.C.
November 11 – 15, 2023



Each year, scientists from around the world congregate to discover new ideas, share their research, and experience the best the field has to offer. Attend so you can: Present research, network with scientists, attend session and events, and browse the exhibit hall. Join the nearly half a million neuroscientists from around the world who have propelled their careers by presenting an abstract at an SfN annual meeting – the premier global neuroscience event.

<https://www.sfn.org/meetings/neuroscience-2023>

10th Annual International Society of Oncoplastic Endocrine Surgeons 2023

Tampa, Florida
November 17 – 18, 2023



The field of endocrine surgery is evolving rapidly with novel diagnostic, noninvasive, and innovative surgical techniques such as AI diagnostics, radiofrequency ablation, and scarless endoscopic/robotic endocrine surgeries. To celebrate the 10-year anniversary of ISOPES, the society's very first meeting in the U.S. will be held in Tampa, Fla. Learn about the latest techniques, evidence-driven outcomes, controversies, and the future of endocrine disease from the

world's most experienced and renowned faculty in oncoplastic endocrine surgery.
<http://www.isopes.org>

2024 Lab Manager Leadership Summit
Denver, Colorado
April 29 – May 1, 2024

The Lab Manager 2024 Leadership Summit will offer actionable advice on the management, business, safety, and staffing challenges facing today's lab managers. The program's expert speakers will provide you



with the tools you need to reach higher levels of engagement and efficiency among your lab teams. Topics will range from dealing with burnout, to incorporating automation into your lab, to lab operations, to effective communication, and much more — an interactive Q&A will follow each session. Attendees will also be able to participate in hands-on workshops and roundtable discussions where they will receive focused advice and learn from real-life examples of leadership success.

<https://www.labmanager.com/lab-manager-leadership-summit-30946>



Endocrine Society Webinars

The Endocrine Society holds webinars throughout the year on many topics, from clinical practice and basic research to career development, advocacy, and more. Check below for information on upcoming webinars and links to previous events. Visit our Center for Learning for a full list of Society educational offerings.

Past webinars have included The Complexities of Cushing's Syndrome: Diagnosing and Managing Patients; Utilizing Nurse Practitioners and Physician Assistants to Optimize Patient Care: How to Build Effective Teams; Genetics in Pituitary Disease; Facts and Controversies of Testosterone Replacement Therapy in Male Hypogonadism; and so much more! Most of the webinars are free for Endocrine Society members, but some do require a small registration fee.

<https://education.endocrine.org/Public/Catalog/Main.aspx>

INTERNATIONAL ITINERARY

ECE 2024:
26th European Congress of Endocrinology

AStockholm, Sweden
May 11 - 14, 2024

Attracting over 4,000 delegates, from more than 100 countries, ECE continues to develop as a world-leading congress for endocrine specialists. Given our community works on diverse research topics and sees patients with a wide range of conditions, ECE enables access to a comprehensive program, covering the breadth of the endocrinology. Whatever your area of interest there will be sessions that are of direct relevance, as well as extensive networking opportunities. The exciting program for ECE 2024 will feature talks from leading names in our field who are exploring some of the most topical and controversial issues in endocrine research and practice.

<https://www.ece-hormones.org/events-deadlines/european-congress-of-endocrinology/ece-2024/>

Third Euro Diabetes, and Endocrinology Congress
Paris, France

December 11 – 12, 2023

The Third Euro Diabetes and Endocrinology Congress is a unique forum for diabetologists and endocrinologists with comparable levels of experience and education to present, exchange ideas, and develop collaborative networks in both academia and industry.

<https://diabetic.plenareno.com/>

World Endocrine, Diabetes & Cardiovascular Conference (EDCC24)

Bangkok, Thailand
March 9 – 10, 2024

The conference program includes local and international speakers with inspiring insights to share on advancing endocrinology, diabetes, cardiovascular health, and metabolism quality improvement through patient and family experiences. This will be an opportunity to come together, collaborate, and share the latest advancements in endocrinology field, offering the opportunity to learn and collaborate across a variety of approaches, disciplines, and specialties, providing engaging on-demand and live sessions.

<https://endocrine.episirus.org/bangkok/>



Estelle M. Everett, MD, MHS, assistant professor in the Department of Medicine in the Division of Endocrinology, Diabetes, and Metabolism in the Division of General Internal Medicine and Health Services Research, David Geffen School of Medicine at UCLA in Los Angeles, Calif.

“

[Everett's session] focused on the phenomenon of clinical inertia, 'which occurs when there is failure to intensify one treatment regimen despite suboptimal glycemic control,' she says. 'This is an issue that occurs all over the world, including in India.'

”

Fresh from receiving a 2022 Endocrine Society Early Investigator Award, Estelle M. Everett, MD, MHS, was a member of this year's Dimensions in Diabetes program that took place in Mumbai, India, in August. She talks to *Endocrine News* about that program, her own research, and how the award has impacted her career.



The Gateway of India on Mumbai's waterfront, which was constructed in 1924 and has been used as a ceremonial entry for dignitaries visiting the country. Photo by Gilberto Souza/Shutterstock

An aerial photograph of a harbor at sunset. The sky is a warm, golden-orange color. The water is filled with numerous colorful ferries and sailboats. In the foreground, a sandy beach is visible with some green foliage. The overall scene is vibrant and busy.

Passage to
INDIA

BY MARK A. NEWMAN



While in Mumbai, Everett snapped this photo at Dhobi Ghat, the world's largest open air laundry.

In August 2023, the ninth installment of the Dimensions in Diabetes program took place in Mumbai, India. Sponsored by the Endocrine Society and CME Mediquest, this year's program covered such topics as preserving kidney function in type 2 diabetes; diabetes-related emergencies; pediatric type 2 diabetes; concurrent treatment of obesity and diabetes; and much more. The program also featured a master clinician session, immersive clinical science session, as well as talks on best practices, panel discussions, and a series of interactive case studies.

The featured faculty included Endocrine Society members Jonathan Q. Purnell, MD, from the Oregon Health and Science University in Portland, Ore., who served as the program's chair; Philip Zeitler, MD, from the Children's Hospital Colorado and the University of Colorado, Aurora; Leigh Perreault, MD, University of Colorado Hospital, Aurora; Donna H. Ryan, MD, from the Pennington Biomedical Research Center in Baton Rouge, La.; Janet B. McGill, MD, MA, FACP, from the Washington University School of Medicine in St. Louis, Mo.; Ketan Dhatariya, MD, MS, FRCP, PhD, from the Norfolk &

Norwich University Hospital in Norfolk, England; and Estelle M. Everett, MD, MHS, from the David Geffen School of Medicine at UCLA in Los Angeles, Calif.

Everett, an assistant professor in the Department of Medicine in the Division of Endocrinology, Diabetes and Metabolism in the Division of General Internal Medicine and Health Services Research, is an early-career Endocrine Society member and her session was entitled "Type 2 Diabetes Management: Intensifying Treatment for Optimal Glycemic Control," that focused on the phenomenon of clinical inertia, "which occurs when there is failure to intensify one treatment regimen despite suboptimal glycemic control," she says. "This is an issue that occurs all over the world, including in India."

Her lecture was a case-based presentation that focused mostly on intensifying type 2 diabetes management when insulin is indicated and "reviewed data comparing various intensification strategies, pros and cons of different diabetes drugs, and the importance of shared decision making when considering how to intensify a patient's regimen," she tells *Endocrine News*.

Everett took time from her busy schedule to tell *Endocrine News* more about the Dimensions in Diabetes program as well as how receiving the Endocrine Society's 2022 Early Investigator Award has impacted her research and her career.

Endocrine News: What surprised you the most about the Dimensions in Diabetes conference from talking to the other endocrinologists you met while in Mumbai?

ESTELLE M. EVERETT: We have a lot of the same challenges when it comes to managing our patients with diabetes. While we practice on different sides of the world, in different types of healthcare systems, when it comes to trying to get our patients to be optimally controlled, we share some of the same clinical challenges (e.g., time constraints, patient-related barriers, treatment costs, etc.).

EN: How important are programs such as Dimensions in Diabetes in terms of reaching out to endocrinologists from other countries?

EVERETT: These programs are essential because it is very important to have opportunities for clinicians from various backgrounds to collaborate, exchange perspectives, and learn from each other.

Everett at the Dimensions in Diabetes conference that took place in Mumbai, India, in August, where she spoke about various approaches to intensifying diabetes management in type 2 diabetes.

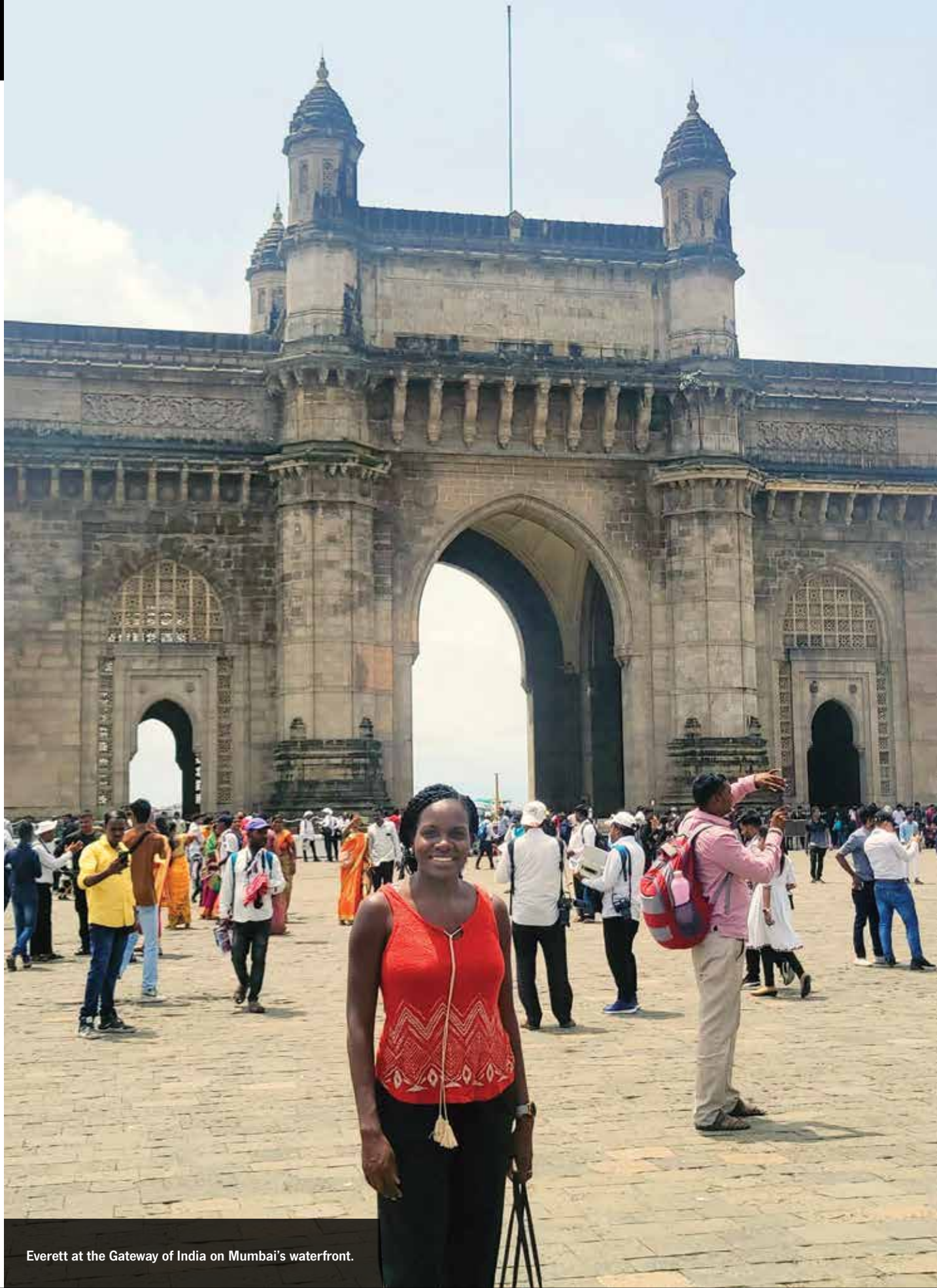


“ We have a lot of the same challenges when it comes to managing our patients with diabetes. While we practice on different sides of the world, in different types of healthcare systems, when it comes to trying to get our patients to be optimally controlled, we share some of the same clinical challenges.”

— ESTELLE M. EVERETT, MD, MHS, FROM THE DAVID GEFKEN SCHOOL OF MEDICINE AT UCLA IN LOS ANGELES, CALIF.



Everett at **ENDO 2023** where she engaged with the presenters at the Health Disparities Poster Session in the **ENDO Expo**.




Everett at the Gateway of India on Mumbai's waterfront.

EN: In 2022, you were one of the recipients of the Endocrine Society's Early Investigator Award. In the intervening year since then has receiving the award further helped you in your career?

EVERETT: I was very grateful to be a recipient of the Early Investigator Award, and I believe this award has brought recognition to my research program and field of study. The monetary award was very helpful and assisted me with the purchase of some national inpatient data that allowed me to perform several studies looking at the impact of diabetes on inpatient admissions (e.g., diabetic hyperglycemic hyperosmolar syndrome (HHS), diabetic ketoacidosis (DKA), L&D admissions).

EN: When you talked to *Endocrine News* about your research last year, you told us that you were exploring and addressing barriers to care in vulnerable populations with type 1 diabetes, with a particular interest in the inequities in both the access and use of diabetes technology. Can you give us an update on your research or on any new areas you're currently studying?

EVERETT: I continue to focus on this area. Since being awarded the Early Investigator Award, I received a National Institutes of Health K23 Career Development grant to evaluate the use of hybrid closed loop insulin pumps in patients with type 1 diabetes with A1c greater than 9% in an academic and safety-net setting. This is a population in which technology use is understudied and underutilized but has the potential to have great benefit. I have also expanded my research to study another understudied population when it comes to diabetes technology: patients with type 2 diabetes who have Medicaid insurance, including those who are primarily Spanish-speaking. I hope both my work in type 1 and type 2 diabetes will be used to inform policy and change prescribing culture surrounding diabetes technology and improve outcomes in these vulnerable populations with diabetes.

When it was first launched in November 2015 in Chennai, India, to coincide with Diabetes Awareness Month, Dimensions in Diabetes was created as a way to deliver cutting-edge diabetes education to endocrinologists throughout India from a largely U.S.-based faculty. Nine years later, the program has become one of the Endocrine Society's most popular international educational summits. And while it has been a blessing for many India-based endocrinologists, it has also proven to be a once-in-a-lifetime opportunity for an early-career member such as Everett to share her knowledge with her endocrinology colleagues around the world. 

Everett participating in ENDO Feud at ENDO 2023



“ I hope both my work in type 1 and type 2 diabetes will be used to inform policy and change prescribing culture surrounding diabetes technology and improve outcomes in these vulnerable populations with diabetes.”

— ESTELLE M. EVERETT, MD, MHS, FROM THE DAVID GEFFEN SCHOOL OF MEDICINE AT UCLA IN LOS ANGELES, CALIF.

— NEWMAN IS THE EXECUTIVE EDITOR OF *ENDOCRINE NEWS* AND HAS BEEN WITH THE ENDOCRINE SOCIETY SINCE 2013. HE WROTE THE *VIVA LA ENDOCRINOLOGIA!* ROUNDTABLE IN THE OCTOBER ISSUE.



Pharm *Fresh*

For decades, physicians have maintained that type 2 diabetes could be delayed or even prevented altogether simply by modifying certain behaviors. **Priyanka Majety, MD**, talks to *Endocrine News* about pharmacological options that could help these patients, but lifestyle modifications are still crucial.

What pharmacological solutions could play a role in preventing diabetes?



BY DEREK BAGLEY

Majety says that none of the medications work as well if “a healthy lifestyle is not in place.”



As we enter National Diabetes Month and head toward World Diabetes Day on November 14, the burden of type 2 diabetes remains huge — and daunting. The global prevalence of diabetes is estimated to be 463 million and projected to rise to 700 million by 2045, meaning a reduced quality of life and higher mortality for many people, as well as higher healthcare costs.

And while many trials such as the Diabetes Prevention Program (DPP), the Finnish Diabetes Prevention Study, and the Da Qing Diabetes Prevention Program have shown that lifestyle modifications can prevent or delay the onset of type 2 diabetes, physicians find that many of their patients with diabetes have a hard time staying consistent and compliant with intensive changes.

Earlier this year, a mini review appeared in *Frontiers of Endocrinology*, titled “Pharmacological approaches to the prevention of type 2 diabetes mellitus.” As the title suggests, the authors cover various pharmacotherapeutic options to prevent type 2 diabetes, as well as the evidence behind their safety and efficacy.

“I strongly believe that prevention is better than cure, especially when it comes to type 2 diabetes,” says Priyanka Majety, MD, assistant professor in the Division of Endocrinology, Diabetes, and Metabolism at Virginia Commonwealth University in Richmond, and the first author of the *Frontiers* paper. “With the recent developments in the field of diabetes, there are medication options that can serve as effective adjunctive therapies to lifestyle changes to help our patients prevent the onset of type 2 diabetes. Our aim with this article was to present the latest evidence on the role of pharmacological interventions in the prevention of type 2 diabetes and to help clinicians identify the best options for their patients.”





Priyanka Majety, MD

“ Using the patient-specific characteristics to direct treatment strategies that are most effective for that individual is crucial. This will ensure success for both us and our patients. We consider the type of diabetes they have, their lifestyle, their comorbid conditions, and complications (heart disease, high blood pressure, kidney disease, hyperlipidemia, etc.) before choosing a medication. **Thankfully, we have so many options to consider for patients with type 2 diabetes.**”

— PRIYANKA MAJETY, MD, ASSISTANT PROFESSOR, DIVISION OF ENDOCRINOLOGY, DIABETES, AND METABOLISM, VIRGINIA COMMONWEALTH UNIVERSITY, RICHMOND.

Modifying Risk Factors

The authors of the *Frontiers* paper point out that the ability to prevent or delay type 2 diabetes by modifying some of its risk factors has been hypothesized for decades, since diabetes develops gradually, leaving open many opportunities for intervention.

Majety says that one of the stages before the onset of frank diabetes is impaired glucose tolerance, and hyperglycemia worsens to the point of diabetes. “Risk factors such as obesity, physical inactivity, and highly processed dietary habits play a role in the development of type 2 diabetes, and these risk factors are modifiable,” she says. “Researchers have hypothesized that if interventions to target weight loss either with lifestyle changes (dietary modifications, increased physical activity) or medications at this stage, diabetes can be prevented or at least delayed.”

And again, lifestyle modifications are what most physicians will start with when treating diabetes. Majety says that these modifications are the cornerstone of treating diabetes and obesity because even with the recent pharmacological developments, if lifestyle changes aren't in place, as soon as the medication becomes unavailable for whatever reason, progress can be lost.

Majety tells *Endocrine News* that one of the strategies that has worked for her to keep her patients motivated is understanding their goals and what's important to them. “Some say they do not want all the complications that come with diabetes that they have witnessed with family members; some want to get healthy for their family, etc.,” she says. “Once I understand what is important to them, I help them come up with clear, realistic

short-term goals. I try to involve family or friends who might be able to support them attain their goals. All the lifestyle changes need to start small, and I encourage them to incorporate into their daily routines if possible — some kind of movement while watching TV, etc. Finally, I tell them that setbacks are common and that it's okay as long as they do not give up. Regular follow-ups and check-ins with the patients help a lot.”

Using Personalized Medicine

When that foundation is set, it is important to choose which medication is best for the patient. Metformin is the oldest drug Majety and her co-authors looked into as an option to prevent diabetes — ideal for most patients, but physicians need to make sure kidney and liver function is appropriate and to choose the dose accordingly.

Then there are the GLP-1 receptor agonists that have been making headlines lately. They're popular, which can sometimes make them hard to access, and they can increase the risk of pancreatitis, so Majety says that she and her co-authors had to





ensure that patients had not had pancreatitis in the past before starting them on these medications. “We also ensure that there is no family or personal history of medullary thyroid cancer, which can be associated with a rare genetic syndrome called MEN (multiple endocrine neoplasia),” she says. “Some patients may have some nausea and abdominal discomfort when they start these medications, but they tend to improve with continued use. So, counseling them is very important and we have some tricks to help them with these unwanted effects if needed — start slow and go up on the dose slowly to give their body some time to adjust to the dose or try other medications in the same category.”

For Majety, it goes back to personalized medicine, which she points to as the future of medicine, especially for diabetes care. “Using the patient-specific characteristics to direct treatment strategies that are most effective for that individual is crucial,” she says. “This will ensure success for both us and our patients. We consider the type of diabetes they have, their lifestyle, their comorbid conditions and complications (heart disease, high blood pressure, kidney disease, hyperlipidemia, etc.) before choosing a medication. Thankfully, we have so many options to consider for patients with type 2 diabetes.”

Majety says that she commonly prescribes these medications and that the vast majority of her patients have benefited — they’ve achieved better control of their diabetes and hit weight loss goals. And while most patients tolerate the medication while titrating slowly, some have had unwanted gastrointestinal side effects. “We try a different medication from the same class, or dose and titrate it up very slowly if possible or keep it at the lowest dose which they can tolerate, etc.,” she says.

A Healthy Lifestyle Is Key

The authors conclude that there are emerging data showing the benefits of these pharmacological therapies to prevent type 2 diabetes, but further studies are required. For now, Majety says this is an exciting time to be helping patients with diabetes and obesity. These medications have been shown to be safe and effective for weight loss, glucose control, and the management of diabetes complications, and now subanalyses from major studies have shown that newer classes of medications like GLP-1 receptor agonists and dual GLP-1 and GIP receptor agonists have the potential to reverse pre-diabetes and delay the risk of developing type 2 diabetes. However, Majety says, dedicated large-scale studies are needed to answer this question more specifically to understand their actual role in diabetes prevention.

For patients, Majety hopes they aren’t shy about asking for assistance. “There are options to help with pre-diabetes and potentially prevent or delay the onset of type 2 diabetes,” she says. “You may be a candidate for one of these medications. Do not hesitate to ask your providers for help. A healthy lifestyle is irreplaceable. None of the medications work as well if a healthy lifestyle is not in place.” ^{EN}

AT A GLANCE

- ▶ Physicians have theorized for decades that type 2 diabetes could be prevented or delayed by modifying risk factors.
- ▶ Several pharmacological therapies to prevent or delay diabetes have recently been shown as safe and effective for weight loss and glucose control.
- ▶ While these drugs are beneficial, they don’t replace lifestyle modification, the foundation of diabetes care.

— BAGLEY IS THE SENIOR EDITOR OF *ENDOCRINE NEWS*. IN THE OCTOBER ISSUE, HE WROTE ABOUT HOW UNDERSTANDING HISPANIC TRADITIONS CAN IMPROVE TREATMENT OUTCOMES IN “CULTURAL CONNECTIONS.”



SAGE advice

Hypoglycemia from overtreatment is a serious but seldom recognized complication in older adults with type 2 diabetes. A new decision support tool developed by the Endocrine Society can help primary care providers avoid overtreatment and cut the risk of hypoglycemic events in these patients.

Reducing the Risk of Hypoglycemia in Older Adults with Diabetes

BY ERIC SEABORG

The use of a clinical decision support tool can reduce the risk of hypoglycemia among older patients with type 2 diabetes, according to a new study spearheaded by the Endocrine Society.

Many studies have shown that too often, physicians who are treating diabetes are so focused on achieving glycemic control goals that they overlook the risk of hypoglycemia in older adults with type 2 diabetes, according to Jeffrey B. Boord, MD, MPH, chief quality and safety officer at Parkview Health in Fort Wayne, Ind., and lead author of the HypoPrevent study, which was published in the *Journal of the American Geriatric Society*.

“We know from the literature that hypoglycemia in older adults with type 2 diabetes is very common and creates morbidity,” Boord says. “However, it is seldom addressed and mitigated in clinical practice.”

The literature shows that older adults often remain on the same medications even after they have had a hospitalization or emergency department visit related to a severe hypoglycemic event. “We screen patients for other complications of diabetes, like eye disease, foot problems, and kidney disease. How about screening them for risk of hypoglycemia?” Boord says.

Reducing Overtreatment

The HypoPrevent study tested whether the use of a clinical decision support tool and shared decision making could encourage clinicians to give greater attention to hypoglycemia risk. The study involved 94 at-risk patients at Pottstown Medical Specialists, a five-site primary care practice in Pennsylvania. The patients were 65 years or older with type 2 diabetes being treated with medications that can cause low blood glucose, such as insulin or sulfonylureas.

During three clinic visits over six months, the clinicians used the online tool and shared decision making to assess hypoglycemic risk, set individualized HbA1c goals, and adjust diabetes medications. The study found that use of the support tool decreased the population at risk of hypoglycemic events by almost 50%. Insulin or sulfonylurea use was decreased or eliminated in 20% of the patients.

The patients also reported a reduction in non-severe hypoglycemic events that led to improvements in their daily functioning, emotional well-being, diabetes management, sleep disruption, and work productivity.

Development of the Tool

The study team developed the “Hypoglycemia Reduction Clinical Decision Support Tool” based on the literature, including Endocrine Society clinical practice guidelines on treating diabetes in older adults and managing patients at high risk for hypoglycemia, as well as American Diabetes Association care standards.

The support tool guides the clinician through questions to ask, care plan development, and provides recommended actions, including pathways to de-escalate treatment if the patient is experiencing hypoglycemic episodes. “It provides guidance,” Boord says. “The goal is not to tell people exactly what to do but to provide questions to ask and guideline-based material that will help inform decisions around hemoglobin HbA1c targets and what to do about hypoglycemia. We got permission to use an outstanding de-escalation algorithm from deprescribing.org.”





Jeffrey B. Boord, MD, MPH

“ We are excited about this study because, up to this point, there really have not been well-designed, pragmatic studies demonstrating how you can do an intervention that will actually reduce the rate or risk of hypoglycemia in a real-world setting in primary care. **Because this intervention was so successful, we hope that our clinical decision support tool could be adopted for use in other primary care settings to lower the risk of hypoglycemia and improve the overall well-being of older adults with diabetes.**”

— JEFFREY B. BOORD, MD, MPH, CHIEF QUALITY AND SAFETY OFFICER, PARKVIEW HEALTH, FORT WAYNE, IND.



RESOURCES

The clinical decision tool and other information are available at: **[endocrine.org/hypoglycemia-prevention-initiative](https://www.endocrine.org/hypoglycemia-prevention-initiative)**.

Koehn DA, Dungan KM, Wallia A, et al. Reducing hypoglycemia from overtreatment of type 2 diabetes in older adults: The HypoPrevent study. *J Am Geriatr Soc*. 2023 Sep 21. doi: 10.1111/jgs.18566. Online ahead of print.

Boord says that the study achieved its positive effect by involving not only physicians but also enlisting diabetes educators and nurses “to ask questions about hypoglycemia and have a meaningful discussion with patients about it. We believe a lot of the effect is just awareness, asking patients about the problem and educating them about it.”

Patients were asked to complete the Treatment Related Impact Measure — Hypoglycemic Events (TRIM-HYPO) survey, an assessment developed by the Mapi Research Trust that is available at no cost for clinical use. “The TRIM-HYPO assessments gave patients a way to identify how non-severe hypoglycemic events were affecting their quality of life,” Boord says.

Hypoglycemia Prevention Initiative

The HypoPrevent study is part of the Hypoglycemia Prevention Initiative, a multi-year joint effort of the Endocrine Society and Avalere Health to determine best practices in primary care to reduce the impact of hypoglycemia on patients older than age 65 with type 2 diabetes who use insulin and/or a sulfonylurea, have a recent A1c <7%, and are at increased risk of hypoglycemia.

The Endocrine Society plans to disseminate the tool widely, according to Robert W. Lash, MD, the Endocrine Society chief medical officer and a member of the study team: “We published the article in a major geriatrics journal so the results would be seen by the most relevant set of clinicians. We’ve also presented the data at the annual meeting of the Association of Diabetes Care and Education Specialists.”

“Primary care and endocrine healthcare providers see a significant number of older individuals with diabetes that are at high risk for hypoglycemia,” says David C. Lieb, MD, professor of endocrinology

“

The goal is not to tell people exactly what to do, but to provide questions to ask and guideline-based material that will help inform decisions around hemoglobin HbA1c targets and what to do about hypoglycemia.”


— JEFFREY B. BOORD, MD, MPH, CHIEF QUALITY AND SAFETY OFFICER, PARKVIEW HEALTH, FORT WAYNE, IND.

and diabetes at Eastern Virginia Medical School. “We need better means for quickly identifying those patients and for reducing their risk for hypoglycemia by appropriately adjusting their glycemic goals and avoiding overtreatment. The results from this study demonstrate that an easy-to-use clinical decision support tool can help providers to do just that and can improve patient-reported outcomes as well.” Lieb co-chaired the committee that wrote “Management of Individuals with Diabetes at High Risk for Hypoglycemia: An Endocrine Society Clinical Practice Guideline” but was not involved in the HypoPrevent Study.

“We are excited about this study because, up to this point, there really have not been well-designed, pragmatic studies demonstrating how you can do an intervention that will actually reduce the rate or risk of hypoglycemia in a real-world setting in primary care,” Boord says. “Because this intervention was so successful, we hope that our clinical decision support tool could be adopted for use in other primary care settings to lower the risk of hypoglycemia and improve the overall well-being of older adults with diabetes.”

The Society has published the decision tool and a wealth of other treatment resources online at: endocrine.org/hypoglycemia-prevention-initiative.

The other authors of this study are Deborah A. Koehn of VCU Stony Point Women’s Health in Richmond, Va.; Kathleen Marie Dungan of The Ohio State University in Columbus, Ohio; Amisha Wallia of Northwestern University Feinberg School of Medicine in Chicago, Ill.; Deborah Otcasek Lucas of Avalere Health and BridgingCare, LLC in Washington, D.C.; Robert W. Lash and Mila N. Becker of the Endocrine Society in Washington, D.C.; and Lawrence D. Dardick of the David Geffen School of Medicine at UCLA in Los Angeles, Calif.

The study was funded by Abbott Laboratories, Eli Lilly and Company, Merck, Novo Nordisk, and Sanofi. 



AT A GLANCE

- ▶ Older patients with diabetes who have hypoglycemic episodes often do not have their treatment adjusted to avoid future episodes.
- ▶ An Endocrine Society team developed a clinical decision support tool that clinicians can use to adjust pharmaceutical use and reduce the risk of hypoglycemia events in older patients with diabetes.
- ▶ Patients treated using the decision tool and shared decision making reported improvements in well-being related to reduced non-severe hypoglycemic events.

— SEABORG IS A FREELANCE WRITER BASED IN CHARLOTTESVILLE, VA. IN THE SEPTEMBER ISSUE, HE WROTE ABOUT THE IMPORTANCE OF ENDOCRINOLOGISTS IN TREATING STEATOTIC LIVER DISEASE IN “ENDOCRINE TARGETS.”

BY DEREK BAGLEY

In the book, *Winning with Diabetes: Inspiring Stories from Athletes to Help You Thrive*, Rita R. Kalyani, MD, MHS, and her co-authors have created an inspirational handbook that clinicians can share with their patients to help them overcome the challenges they may face each day.

IndyCar driver Charlie Kimball's endocrinologist was an unofficial member of his pit crew who encouraged him to not give up on his dreams just because he had diabetes.



Photo: Grindstone Media Group / Shutterstock.com

Good SPORTS

ATHLETES WITH DIABETES ARE FEATURED IN AN INSPIRATIONAL NEW BOOK.

Sports can teach us a lot: teamwork, accountability, resiliency. In the preface to the book *Winning with Diabetes: Inspiring Stories from Athletes to Help You Thrive*, the authors write that one of the most important lessons from sports is how to bounce back from a tough day. When something isn't working well, what adjustments can be made for better results? They ask us to imagine a basketball team's sharpshooter hitting a hot streak, and how the opposing team's coach would likely call a timeout so the team could regroup and guard the sharpshooter better. "Consider this book a timeout," the authors write.

"In this book, we approach diabetes using the perspective of the patient experience," says Rita R. Kalyani, MD, MHS,

associate professor of medicine and a diabetes specialist at the Johns Hopkins University School of Medicine in Baltimore, Md., and one of the book's authors. "We thought that it could be helpful to people with diabetes to hear narratives from a community of people out there who are also struggling with the same challenges, and be inspired by those who have 'thrived' with the disease." Kalyani is also a recipient of the Endocrine Society's 2022 Outstanding Public Service Laureate Award.

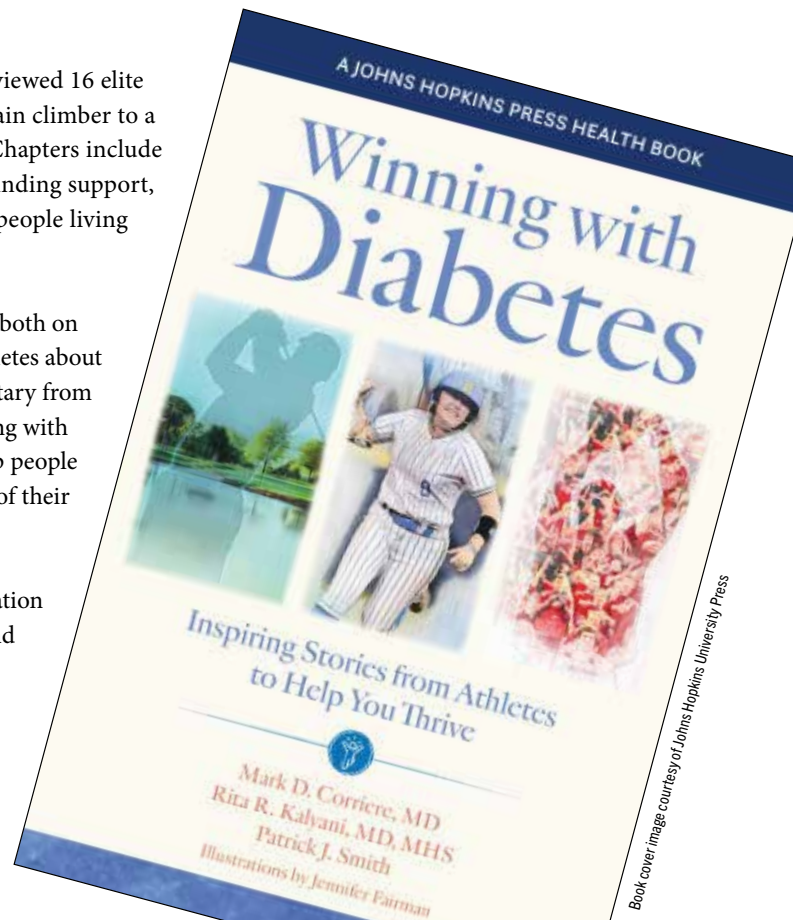
Kalyani and her coauthors — Mark D. Corriere, MD, FACS, adjunct professor of medicine at the Johns Hopkins University School of Medicine and clinical endocrinologist at Maryland Endocrine in Columbia, Md., and Patrick

Smith, a Baltimore-based journalist and biomedical writer, interviewed 16 elite athletes, from an Olympic gold medalist to a professional mountain climber to a college softball champion, about their challenges with diabetes. Chapters include real-life stories of diagnosis, adapting new day-to-day routines, finding support, training, competing, and connecting with communities of other people living with diabetes.

The book features advice for facing common fears and challenges, both on and off the playing field, and focuses on firsthand stories from athletes about their experiences living with diabetes, paired with expert commentary from the authors. Chapters also include summaries of key concepts, along with full-page color illustrations and other graphics, all designed to help people with diabetes and the providers caring for them to make the most of their timeout.

Endocrine News sat down with the authors to talk about the inspiration for the book, how these stories can inform optimal clinical care, and how stories like these can help patients with diabetes thrive.

Endocrine News: First off, what was the background of your book, *Winning with Diabetes: Inspiring Stories from Athletes to Help You Thrive*?



Rita R. Kalyani, MD, MHS

“ The way information is communicated makes a huge difference in how it’s received. So many studies that have shown that compassionate communication during interactions between a patient and provider can be nearly as important as taking the medications properly for health outcomes. **And I think that effective communication is not only important at diagnosis, it’s also important throughout a lifetime of living with a disease.**”

— RITA R. KALYANI, MD, MHS, ASSOCIATE PROFESSOR OF MEDICINE, JOHNS HOPKINS UNIVERSITY SCHOOL OF MEDICINE, BALTIMORE, MD



The Baltimore Ravens' Mark Andrews was told to put on 40 pounds of muscle when he was recruited to be a tight end rather than a wide receiver, not the easiest task for an athlete with type 1 diabetes. But he worked with the team's nutritionist to figure out what worked best for him, according to Corriere. Photo: Baltimore Ravens

Rita R. Kalyani: Mark and I had previously co-authored a book titled *Diabetes Head to Toe: Everything You Need to Know about Diagnosis, Treatment, and Living with Diabetes*, along with two other colleagues back in 2018. That book focused more on educational content and summarized, in bite-sized sections, all the different ways that diabetes could affect the body from head to toe. The goal was to educate people with diabetes so they could be aware of the warning signs and symptoms of diabetes-related complications early on and could alert their healthcare provider to seek the appropriate treatment before complications arose.

This book, in some ways, is complementary to the first one. While we highlight important educational concepts in the expert commentary, the focus of the narrative is the athletes' stories and touches upon what it is like to live day to day with diabetes, what are some of the common challenges and successes, and what can anyone who has diabetes learn from those who have been successful in their own professional goals, irrespective of whether they're an athlete themselves.

We organized the chapters to reflect the life course of a person living with diabetes, from the athletes' initial diagnosis of diabetes, to learning about diabetes, self-care practices and diabetes, and routine management. One of the key chapters focuses on the athletes' stories of "winning with diabetes," or the question of "How can I accomplish my life goals?" These goals don't have to be athletic pursuits, necessarily. And then the last chapter focuses

on building a community, or "How can you give back?" I think we were all impressed by how much these athletes really wanted to give back. Some of them started their own organizations, some of them rode across the country to raise awareness. It was quite remarkable to hear their stories.

Mark D. Corriere: We were looking for a way to highlight people who've been successful with diabetes and haven't let diabetes hold them back in any way. We kicked around a lot of ideas. We talked about telling the stories of politicians, Supreme Court justices, business leaders, actors, all with diabetes. I'll be honest, I'm a huge sports enthusiast. If I'm not focusing on diabetes or spending time with my family, it's watching or reading about the Orioles or Notre Dame football. I kept steering these stories back to, "Yeah, you know, that person's interesting. But did you know this athlete has diabetes?"

The ability to tell these athletes' stories and show how well they've thrived was really something that excited me. We wanted to use the athlete's success to show you can thrive in any walk of life. Whether it's heading off to college, starting a new job, or auditioning for a part in a play, diabetes does not need to hold you back.

EN: How will these athletes' personal accounts help readers with diabetes thrive? And can you talk a little about how this sort of camaraderie

and community spirit can help patients with diabetes?

RRK: Every individual with diabetes is different. Some people may prefer to be private and manage diabetes on their own, while some might seek the support of others in a more public way. We felt that by sharing the candid stories of individuals who have had challenges but also thrived while living with the disease, that any person living with diabetes and their caregivers could benefit from feeling like they're a part of that shared community.

The word “thrive” has many definitions, but the one that's most relevant to the theme of our book is the idea of progressing toward or realizing a goal, either despite or because of circumstances.

In the context of the athletes in this book, we initially sought out to understand how they were so successful professionally despite the fact that they had diabetes. But what we found, instead, is that most of the athletes we interviewed felt that they were successful in part due to the lessons they learned from an early age living with a chronic disease, such as learning self-care practices, healthy eating habits, and the maturity and determination that they needed to self-manage the disease from a young age.

EN: Can you talk about the importance of compassion when delivering news to patients with diabetes?

MDC: It's never fun news to tell a patient they have a new diagnosis of a chronic disease like diabetes, but just being direct and trying to be as empathetic as you can is the best approach. I emphasize that if we focus on managing your diabetes and make the right changes, this doesn't have to impact you negatively in your life. It's important to convey that there's nothing out there that you can't really accomplish with diabetes.

EN: Right, like IndyCar driver Charlie Kimball's endocrinologist encouraging him to not give up on his dreams was nice to read. It

seems like such a simple and effective way to begin the treatment process: “Don't let this hold you back.”

RRK: Exactly. The way information is communicated makes a huge difference in how it's received. So many studies that have shown that compassionate communication during interactions between a patient and provider can be nearly as important as taking the medications properly for health outcomes. And I think that effective communication is not only important at diagnosis, it's also important throughout a lifetime of living with a disease.

Whether a patient feels like they can openly communicate their experiences with the provider, whether providers effectively communicate important medical information to the patient, and whether there's trust in the relationship — all these aspects are important.

For parents with young children who have diabetes, these stories can be tremendously encouraging for them as well, to learn of the success stories. That is an audience where we did think that this book could fill a critical need in terms of providing hope and support, especially in those early stages of diabetes diagnosis.

EN: In NFL tight end Mark Andrews's case, you write that he was able to be an athlete despite his diabetes because he put in the effort to learn about the disease and how to take care of himself. Motivation is sometimes a barrier for patients with diabetes. How do you keep your patients motivated?

MDC: You're constantly pushing your patients and trying to motivate them and encourage them. Sometimes it works great, and sometimes it doesn't, but you always want to be positive, and you always want to help them move forward and learn from each experience.

Mark Andrews told a story of showing up at college as a wide receiver and they said, “Hey, you're not going to be a



“ You’re constantly pushing your patients and trying to motivate them and encourage them. **Sometimes it works great, and sometimes it doesn’t, but you always want to be positive, and you always want to help them move forward and learn from each experience.**”

— MARK D. CORRIERE, MD, ADJUNCT PROFESSOR OF MEDICINE, JOHNS HOPKINS UNIVERSITY SCHOOL OF MEDICINE; CLINICAL ENDOCRINOLOGIST, MARYLAND ENDOCRINE, COLUMBIA, MD.

wide receiver. You’re going to be a tight end. Go put on 40 pounds of muscle.” Well, that’s harder to do when you have type 1 diabetes.

So, he had to learn. He worked with the nutritionist there; they tried different things, some worked and some did not. But over time they found something that was successful for him. He could have walked away after the first few weeks and said, “No, I can’t gain weight, sorry,” and he wouldn’t be an all-pro in the NFL. He kept persisting and didn’t allow his diabetes to be an impediment.

RRK: That was a common thread, the lifelong learning. And while things change as circumstances change, I think that was one thing that was true of all the athletes we talked to, which is how trial and error was important. I think that approach to chronic disease, that you will have to learn new things along the way, was very important to their success.

You asked about how we can keep patients motivated. To further add to what Mark talked about, celebrating small successes is important. I think that often, especially in clinical practice, we’re focused on having patients achieve their metabolic goals, for instance, an A1c less than 7%. But if an individual starts from an A1c of 10% and you see them in clinic a few months later and their A1c is 8.5%, that is something to celebrate and to use as a basis for encouragement to continue working toward their goals.

As endocrinologists, we work as part of a comprehensive care team. The diabetes educators are also incredibly important in facilitating that motivation and providing patient education, and truly being partners in this process of helping people with diabetes attain their individualized metabolic targets. So, it’s not a solo endeavor.

EN: Discrimination still happens to patients with diabetes, as you write in the case of professional mountain climber Will Cross and former Major League Baseball pitcher Jason Johnson. What more can be done to break down stigmas and barriers?

RRK: In general, the Americans with Disabilities Acts does require all employers to support the needs of people with

diabetes in the workplace. But we know that's unfortunately not always true, especially in some professions that still require waivers or exemptions such as the military, law enforcement, or aviation.

Ensuring that supervisors are educated on the needs of the employee with diabetes is the first step. Technology has greatly facilitated diabetes management in the workplace. For instance, individuals with diabetes do not necessarily have to go to a private area to prick their finger as they may have had to do in the past, and instead can see their glucose numbers in real time on a smartphone. But there are many dietary modifications that might still be needed throughout the workday. People might need to snack in between meals, or take insulin injections multiple times a day if they're not on an insulin pump, and educating colleagues is an ongoing process.

But hopefully, with more information, employers are better equipped to respond and meet the needs of an individual with diabetes.

EN: What would you like endocrinologists treating diabetes and people living with diabetes to gain from reading this book?

MDC: That diabetes doesn't have to hold you back from anything you want to achieve in life. If you have a goal in life, set your goal, then try to achieve it. Incorporate diabetes as part of your plan.

A common theme emerged from many of the athletes we spoke to. They felt they were successful not in spite of their diabetes but because of it. Having diabetes meant they needed to pay more attention to their training, nutrition, recovery, and every aspect of their sport. Many felt this was actually an advantage to them. This doesn't have to just be athletics. The same principles apply to business, in law, in politics, in school, in whatever you want to do in life. So, don't let diabetes hold you back in any way, shape, or form.

RRK: I think from the perspective of the endocrinologist, acknowledging the experiences of a person living with diabetes and what it's like day to day to live with a chronic disease is imperative to delivering patient-centered care.

That's perhaps one of the most important things we want endocrinologists to take away from the book. We also hope endocrinologists can use insights from the athletes' stories to guide how they interact with their own patients who have diabetes, in order to help them achieve the best health outcomes they can.

We want to emphasize that these stories were intended to be broadly relatable for people with diabetes, not just those who are engaged in serious athletic pursuits or even amateur athletic pursuits. We use the athletes' stories as a lens through which to highlight the common challenges and successes that an individual with diabetes can encounter during their lifetime, while at the same time recognizing that each individual's experiences living with diabetes will be distinct.

I think this last quote from Sebastien Sasseville, a Canadian mountain climber and distance runner who summited Mount Everest and ran across Canada, summarizes the takeaway message nicely. He said, "I've used diabetes as a purpose, a reason to do these difficult things. I have a disease that forces me to live a healthy life. I want to figure out my full potential and see what I can do." And, as endocrinologists, it is our job to facilitate that success for our patients with diabetes no matter what they pursue. It's not always easy but it is definitely possible. ^{EN}



WORK Left to Do

Q&A with Mitchell A. Lazar, MD, PhD

Despite being inducted into what he calls the “Endocrine Hall of Fame” upon receiving the Endocrine Society’s 2023 Fred Conrad Koch Lifetime Achievement Award, Mitchell A. Lazar, MD, PhD, reflects on his achievements and his legacy. However, he wants to make sure that despite such lofty recognition, he assures us that he still has “a couple of achievements” left in his lifetime!

BY GLENDA FAUNTLEROY SHAW

With culture wars and pandemic fears at their peak in 2020, Mitchell A. Lazar, MD, PhD, wanted the world to know his laboratory was a place of tolerance and acceptance. Adding an inclusive message on his lab website may seem like a simple gesture to many, but for Lazar and his team, it ranked high among his great deeds, just one of many that helped earn him the Endocrine Society's highest honor — the 2023 Fred Conrad Koch Lifetime Achievement Laureate Award.

Lazar is the Willard and Rhoda Ware Professor in Diabetes and Metabolic Diseases at the Perelman School of Medicine at the University of Pennsylvania in Philadelphia, where he joined the faculty in 1989. He is also the founding director of the university's Institute for Diabetes, Obesity, and Metabolism. Known for his groundbreaking work related to the basic mechanisms of nuclear receptor action and their role in obesity and diabetes, Lazar also most notably discovered the hormone resistin.

Endocrine News spoke with Lazar recently to learn more about his life reflections and what has mattered most so far.

Endocrine News: Fred Conrad Koch was a renowned endocrinologist and the Endocrine Society's 19th president. What does it mean to be included among past Society Lifetime Achievement honorees?

Mitchell A. Lazar, MD, PhD: The Endocrine Society and the endocrine science it fosters represent the oldest

“ In the course of my research, one of the things that I studied was how neurotransmitters feed back and inhibit their own production. In my clinical training, **I realized that's what endocrinology was all about. It was about feedback and the concept called homeostasis, which is keeping the internal milieu constant. I like to think it was a lightbulb moment** ”

— MITCHELL A. LAZAR, MD, PHD, WILLARD AND RHODA WARE PROFESSOR IN DIABETES AND METABOLIC DISEASES, PERELMAN SCHOOL OF MEDICINE, UNIVERSITY OF PENNSYLVANIA IN PHILADELPHIA

and most successful applications of the scientific method to biomedical questions. The great accomplishments of Dr. Koch epitomize the honor of this award. I've been going to the Endocrine Society meetings for about 40 years. Every year someone has gotten that award, and it's always someone that I admire. I'm a baseball fan, and in my acceptance remarks for the Koch award I said that it was like being inducted into the Endocrine Hall of Fame. Many people have been instrumental in my success, so I did my best to make sure that everyone knew how important they were to me, even if I couldn't mention them by name.

EN: Being honored with a Lifetime Achievement award makes people reflect on their proudest career moments. What stands out most in your career?

MAL: That is a fantastic question. I think there are so many, but I'm going to compartmentalize it into the science. We made discoveries of new hormones and understanding how hormones work in a way that has relevance to endocrine diseases, including diabetes and obesity. So, for me in that context, it was the discovery of the hormone resistin, discovery of nuclear receptor PPAR-gamma, which is important for insulin resistance in diabetes, and the discovery of the nuclear receptor REV-ERB and its role as a link between circadian rhythms and metabolism.

But I'm equally proud of leading the University of Pennsylvania Division of Endocrinology, Diabetes, and Metabolism on a path to new heights, and that it's continuing to thrive even after I stepped down from that position a couple of years ago. I also was founding director of a new Institute for Diabetes, Obesity, and Metabolism that I still am excited to run and see how well it's doing, as well as the faculty I recruited both to the IDOM and the EDM division, who are doing amazing things. Also, of huge importance are the many former trainees in my lab who are now leading in their own independent positions. These are my legacies. Finally, even though I'm thrilled to be the Endocrine Society's Lifetime

Achievement Award winner, I still think I have a couple of achievements left in my lifetime.

EN: Can you recall the moment when you knew endocrinology would be your specialty?

MAL: I think the lesson I learned is to do science that you're excited about. In my own case, I was a chemistry major in college and thought I would be a chemist. But because of a history of mental illness in my family, which I was sure was due to a chemical imbalance in the brain, I decided to go to medical school and get training in the biochemical basis of behavior. I did that at Stanford and was well-trained as a scientist. I really liked my project, but I also got the feeling that in my productive years as a biomedical scientist, we weren't going to solve this problem. It was too complicated. This was 40 years ago.

But in the course of my research, one of the things that I studied was how neurotransmitters feed back and inhibit their own production. In my clinical training, I realized that's what endocrinology was all about. It was about feedback and the concept called homeostasis, which is keeping the internal



“ It was over some time that I realized this was the ideal field for me because I really enjoyed mechanistic thinking and thought **I could make a difference in advancing knowledge of how hormone action is regulated and how hormones regulate metabolism.**”

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Lazar pictured with 2022 – 2023 Endocrine Society President Ursula B. Kaiser, MD, upon accepting the 2023 Fred Conrad Koch Lifetime Achievement Award at ENDO 2023 in Chicago in June.

milieu constant. I like to think it was a lightbulb moment, but probably it was over some time that I realized this was the ideal field for me because I really enjoyed mechanistic thinking and thought I could make a difference in advancing knowledge of how hormone action is regulated and how hormones regulate metabolism.

EN: What is your lab team currently working on at the University of Pennsylvania?

MAL: In one sentence, I would say we're working on understanding the mechanisms by which hormones, through nuclear receptors, regulate gene expression in a way that affects metabolism and circadian rhythms.

EN: The Lazar Lab website (med.upenn.edu/lazarlab) has a banner that includes the message: "We believe science is real, love is love, Black lives matter, Immigrants are welcome, Stop Asian Hate..." A version of this has been popular on yard signs, but I've never seen it on a lab website. What motivated you to include the message on yours?

MAL: Well, I'm not ashamed to tell you that it was during the pandemic and some of the societal unrest of the last few years that I really wanted to make a statement and my lab members wanted to make a statement. My lab members are younger than me. They're quite a diverse group, and we thought it was important to say something.

Actually, the original version of that had everything but the stop Asian hate, and yet so many scientists in my lab and elsewhere are either Asian Americans or from Asia. During the COVID-19 crisis, my Chinese trainees were really singled out in society ... it was related to some of the political things that were going on, and people were blaming them in the street for COVID-19. So, we added that. Again, not unique in any way. We didn't invent that. I just felt it was really important to make that statement. Now that some of the acute issues may be over, the whole issue is not over. It reminds us, and hopefully other people perusing our website, that we still have work to do. **EN**

– SHAW IS A FREELANCE JOURNALIST BASED IN CARMEL, IND. SHE IS A REGULAR CONTRIBUTOR TO ENDOCRINE NEWS AND WRITES THE MONTHLY LABORATORY NOTES COLUMN.

Society Continues to Advocate for Insulin Affordability



The Endocrine Society continues to advocate for insulin affordability. Although new legislation to make insulin more affordable has been stalled in Congress, the Centers for Medicare and Medicaid Services (CMS) continues to advance a program to implement drug price negotiations to lower the cost of certain prescription drugs, including several diabetes medications.

CMS recently hosted a series of listening sessions on the drug price negotiation program, which was passed into law as part of the Inflation Reduction Act (IRA) and gives CMS the authority to negotiate with drug manufacturers on the price of prescription drugs including insulin.

The Society strongly supported the IRA, which also instituted a \$35 per month co-pay cap on insulin for people on Medicare. We attended the listening session held to discuss two insulins, NovoLog and Fiasp, which are eligible for price negotiation.

We will continue to monitor this issue closely as CMS works to implement this new program. The Society has been a longtime supporter of this effort and recommended allowing the government to negotiate the price of prescription drugs, including insulin, as part of our position statement on insulin access and affordability. We also continue to urge Congress to extend the \$35 per month insulin co-pay cap to the private insurance market.

Endocrine Society Recommendations Incorporated in Draft UN Plastics Treaty

On September 6, the United Nations Environment Programme (UNEP) Secretariat released the initial “zero” draft of a treaty to address plastic pollution. The zero draft is a starting point for more detailed negotiations that will resume this month at the third session of the Intergovernmental Negotiating Committee (INC3) to develop an international legally binding instrument on plastic pollution.

Having participated in the INC3 throughout the process of developing the zero draft, we are encouraged that many of our priorities were incorporated as options in the zero draft, such as limits on plastic production and identification and regulation of hazardous chemicals in plastic products. The treaty also introduces provisions related to the monitoring and prioritization of hazardous chemicals in plastics, with the involvement of a scientific body charged with monitoring and evaluating the treaty after implementation. Critically, the draft references improving human health as an overarching objective, which we advocated for from the outset.

The release of the zero draft is an important milestone in the process of delivering the treaty and represents over a year of challenging negotiations just to get to this point; however, much work remains, and we expect that the process of achieving a consensus will be challenging. The Endocrine Society will send a delegation to INC3 to influence the negotiations and ensure that the treaty includes provisions that address the hazardous endocrine-disrupting chemicals (EDCs) added to plastic during production. Furthermore, we will continue to stay involved in the process and negotiations through the adoption of a final treaty to ensure that the result is protective of human health and includes concrete actions to reduce exposure to harmful EDCs in plastic.



Join our Advocacy Efforts: Online Campaigns Make a Difference

The Endocrine Society is recognized as a trusted policy advisor in several clinical and research areas. Currently, we are working on several advocacy priorities including:

- ▶ Funding for the National Institutes of Health (NIH);
- ▶ Extending the Special Diabetes Program (SDP);
- ▶ Making insulin affordable; and
- ▶ Providing Medicare coverage for anti-obesity medications.

To make Endocrine Society advocacy effective, it is crucial to have member participation because policymakers need to hear from their constituents that these issues are important to them. While the Society conducts Hill Days to have its members come to Washington, D.C., and visit with their representatives and

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senators, another way to help educate and influence your elected officials is to participate in Endocrine Society online advocacy campaigns by visiting: www.endocrine.org/takeaction.


Online advocacy campaigns can be very effective because they are a way to generate lots of emails into a congressional office. Our campaigns have proven successful because they are timed to when members of Congress are considering a specific issue and they include a concise and informative (not partisan)



message. Many people ask if these emails really work and if anyone actually reads them. The answer to both questions is absolutely yes. Endocrine Society victories, including passage of several pieces of legislation happened because we generated emails from our campaigns. Congressional offices must count every email that comes in, and they take them seriously. Members of Congress have shared with us that sometimes it takes just a dozen emails from constituents to change their votes and call their attention to an issue.

Our online advocacy campaigns are also quick and easy to use.

- ▶ Visit: www.endocrine.org/takeaction.
- ▶ Click on the campaign of interest.
- ▶ Enter your contact information. Our software will direct the message to the correct congressional office(s) based on your ZIP code.
- ▶ The campaign offers a sample letter that you can personalize or leave as is and click to submit.

This will take less than a minute of your time but will have a significant impact. We encourage all U.S.-based members to participate. We also, as appropriate, offer some targeted online advocacy campaigns for policymakers outside the U.S. (Note: policymakers often only accept emails from constituents from their state/district/country.) 

Special Treatment

Cutting-edge advancements in endocrinology continue to move diabetes treatment in the right direction faster than ever before.

The treatment of diabetes is continually evolving. More than a century ago, a diabetes diagnosis was a death sentence, and although there is not yet a cure, endless updates in diabetes care help ease the burden of both the patient and the provider. Although hurdles remain, ranging from expensive medications and devices to a lack of understanding of what's expected for optimal care, medical advancements continue to make diabetes more manageable than ever. Here, we look at some of the latest products endocrinologists and their patients rely on to treat diabetes.

COMPILED AND WRITTEN BY COURTNEY A. CARSON



◀ Tempo

The Tempo™ Personalized Diabetes Management Platform consists of three key components — the Tempo Smart Button®; a compatible app, TempoSmart™; and a prefilled insulin pen, Tempo Pen® — which work together to deliver personalized guidance for adults with diabetes. The Tempo Smart Button™ attaches to the Tempo Pen™ and pairs with the TempoSmart™ App for insulin dose-related data to be transferred to a smartphone. The app combines this data with readings from the Tempo Blood Glucose Meter (BGM) and/or Dexcom Continuous Glucose Monitoring (CGM) System and provides personalized progress reports to assist with the self-management of diabetes. www.lilytempo.com

Diabeloop ▶

The DBLG1 self-learning algorithm developed by Diabeloop automates and personalizes the treatment of type 1 diabetes. DBLG1 is hosted on a dedicated handset, the user interface, and is connected to a continuous glucose monitor (CGM) and insulin pump. Every five minutes, a glucose measurement is transmitted via Bluetooth® technology to the handset, which the DBLG1 artificial intelligence analyzes in real time, while considering the patient's physiology, history, and data entries (meals or exercise) to determine the correct dose of insulin to administer. www.diabeloop.com





◀ iLet Bionic Pancreas

In May 2023, Beta Bionics, Inc., announced FDA 510(k) clearance and the commercial launch of the iLet Bionic Pancreas. The iLet is the first and only automated insulin-delivery system that does not require carb counting and fully automates 100% of all user insulin doses, resulting in no calculations, less input, and less burden for the user. Paired with the Dexcom G6 Continuous Glucose Monitoring System, the iLet was designed to alleviate the work of diabetes management in everyday life and nearly eliminate the expertise that has been required to set up and manage a traditional insulin pump. With the iLet,

healthcare providers can spend less time with technology and more time with their patient. The only input that is required to get started is the user's weight — the iLet does the rest. www.betabionics.com

Mallya ▼

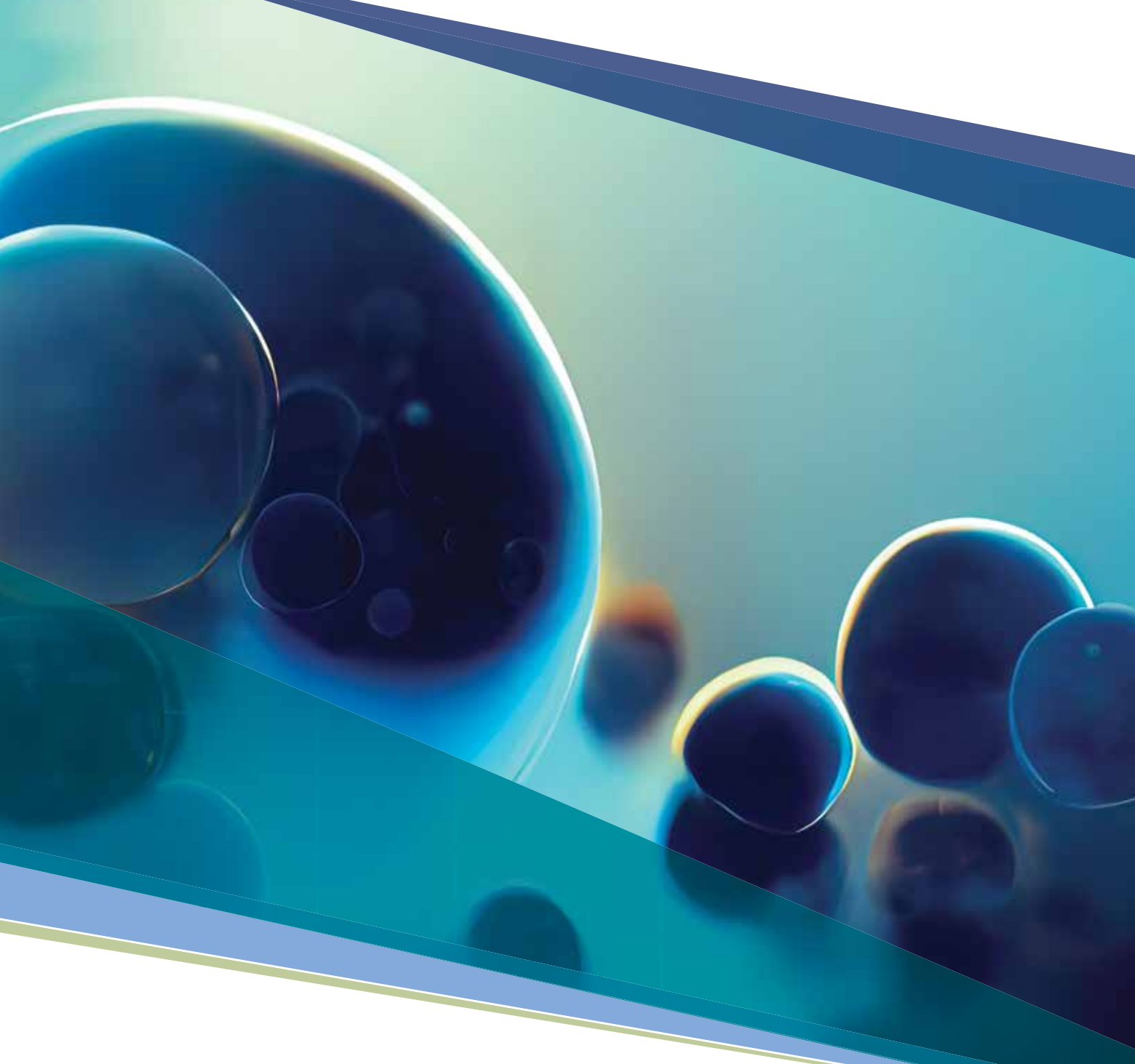
Another product that recently secured clearance from the FDA is BIOCORP's Mallya smart medical device. Mallya is a smart sensor that has been designed to be attached directly to insulin pen injectors, converting them into connected devices. It automatically records important treatment information, including selected insulin units as well as the date and time of injection, and transmits the data to a dedicated digital app. Mallya is claimed to be the first device capable of automatically connecting different insulin and GLP-1 drugs to be approved in the US. www.my-mallya.com



◀ Eversense E3

The only implantable sensor for long-term wear, the Eversense® E3 offers continuous glucose readings for up to six months. Its removable and rechargeable smart transmitter delivers on-body vibration alerts when there are high or low glucose values, providing patients with diabetes discretion and peace of mind. The system also features a convenient app for real-time diabetes monitoring and management. The Smart Transmitter wirelessly powers the sensor. This activates the sensor, which flashes an LED light source. A fluorescent polymer coating on the outside of the sensor responds to the LED light. Glucose from the body reversibly binds to the coating, and the amount of light emitted by the coating rises and falls with the body's glucose concentration. This emitted light is measured by photodetectors inside the sensor. Special circuitry digitizes the measurements and sends the data to the smart transmitter, which calculates the glucose value, direction, and rate of change and sends the information to the mobile app. While the current model lasts six months, current trials are now underway to extend use of the sensors to a full year. www.ascensiadiabetes.com ^{EN}

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SHOWCASE YOUR RESEARCH

SUBMIT YOUR ABSTRACT BY WEDNESDAY, DECEMBER 6, 2023

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