



VIDACARE CORPORATION PROFILE

Established in 2001, Vidacare Corporation is the pioneer of a broad technology platform for use in the field of intraosseous (inside the bone) medicine. Current products include the EZ-IO[®] Intraosseous Infusion System, the OnControl[™] Bone Marrow System and the OnControl[™] Bone Access System. Applications include vascular access, emergency and disaster medicine, oncology and spinal surgery. Privately held, the company is based in San Antonio, Texas, and its products are marketed in over 50 countries worldwide.



HISTORY

The intraosseous space was first discovered as a non-collapsible vein in 1922 when C.K. Drinker, MD, of Harvard University examined the circulation of the sternum and confirmed that fluids infused into the bone marrow were quickly absorbed into the central circulation, providing a viable alternative to failed vascular access with traditional methods. However, a reliable, safe and easy method to access this intraosseous space proved elusive, and this area of medicine and its opportunities remained largely unexplored.

In 2000, Dr. Larry Miller, an emergency physician for over 30 years, and Vidacare's founder, envisioned a device that could access the intraosseous (IO) space safely. Dr. Miller and other researchers set out to develop a technology platform that could be utilized in a broad range of health care settings. These applications included vascular access, bone marrow biopsies and aspirations, regenerative medicine and more.

In 2001, Vidacare Corporation was established to bring this technology platform to market. In 2004, Vidacare received FDA clearance for the EZ-IO[®] Intraosseous Infusion System – the first battery-powered device to establish immediate vascular access using the IO space. In 2007, Vidacare received an additional FDA clearance for the OnControl[™] Bone Marrow System, the first significant improvement to bone marrow procedures in decades. In 2008, the company received FDA clearance for the OnControl[™] Bone Access System for use in spinal surgery procedures.

Today, Vidacare's technology platform is widely recognized as a pioneer in the field of intraosseous medicine. The EZ-IO technology is used in 90 percent of US advanced life support ambulances and over half of US Emergency Departments, as well as the US Military, and is available in over 50 countries. While IO is well-established as a standard of care for vascular access, it is now being applied in a broader variety of health care settings to both non-emergent and emergent patients.



TECHNOLOGY PLATFORM

Vidacare's technology platform enables medical professionals to access the intraosseous space in a safe, effective and simple manner.

Each Vidacare product incorporates a patented power driver and one or more needles to access the intraosseous space for a variety of medical, therapeutic and diagnostic purposes. For each clinical application, the speed and torque of the driver are carefully matched to the needles to achieve rapid bone penetration and to provide optimal user control.

Vidacare holds a large number of patents for this technology platform and its multiple product applications.



VIDACARE CORPORATION – PRODUCT SUMMARY

- Vidacare’s first product, the EZ-IO® Intraosseous Infusion System provides immediate vascular access for the delivery of essential medications and fluids, and is used by 90 percent of US advanced life support ambulances and over half of US Emergency Departments, as well as the US Military. The product is available in over 50 countries worldwide.



- Vidacare’s OnControl™ Bone Marrow System provides the first significant advance to bone marrow biopsies and aspirations in more than 50 years, offering patients and clinicians a vastly improved procedure option.



- The OnControl™ Bone Access System provides rapid and safe access to vertebrae during vertebroplasty.



All Vidacare Corporation products are FDA cleared and carry CE Mark approval.



INTRAOSSIOUS MEDICINE BACKGROUND

What is the Intraosseous Space?

The intraosseous (IO) space is the interior of the bone where bone marrow is located and where blood and stem cells are made. It is the body's largest non-collapsible vein, allowing for rapid infusion of fluids and medications into the central circulatory system as quickly as traditional intravenous lines (IVs).

Historically, access to the intraosseous (IO) space was obtained using a manual device consisting of a single needle with a round or T-shaped handle attached to the needle. Depending on the medical need, the needle was manually inserted into the patient in a forceful, strenuous and painful procedure. With Vidacare's patented technology, the need for these arduous procedures is now obsolete.

The intraosseous (IO) space is a vital part of many medical, diagnostic and therapeutic applications:

- **Vascular access.** The intraosseous space is the human body's largest non-collapsible vein, providing immediate access to the vascular system. Life-saving fluids and medications can be administered via the IO route when traditional vascular access is difficult or impossible, but medically necessary.
- **Hematology and oncology diagnoses and treatment management.** Accessing bone marrow via the intraosseous space is an essential part of the diagnostic process in hematology and oncology practices. Current research evaluating the use of the IO space for therapeutic applications also looks promising.
- **Surgical bone access applications.** Accessing the inner space of the bone is essential for many clinical procedures, including vertebroplasty.
- **Bone marrow harvesting.** Clinicians are more and more frequently accessing the intraosseous space to harvest bone marrow, and the stem cells contained in the marrow, for use in emerging regenerative medical procedures.

How is Vidacare's technology platform improving the state of medicine related to IO today?

Vidacare's innovative technology platform, based on its patented power drivers and needles, has dissolved a primary barrier in the field of intraosseous medicine – easy and safe access to the intraosseous space. This unique platform allows the continued expansion of intraosseous medicine into a number of clinical areas.

Since research has verified the absorption of medications and fluids through the intraosseous space is equivalent to the intravenous route, the possibilities for using this non-collapsible vein have been evolving. Well-established as a standard of care for vascular access when intravenous access is either delayed or impossible, intraosseous technology is now being applied in a broader variety of health care settings to both non-emergent and emergent patients.

For vascular access, the EZ-IO[®] Intraosseous Infusion System provides immediate, reliable and controllable intraosseous access, safely penetrating the bone marrow in seconds. The EZ-IO has set a new standard for intraosseous medicine by easily providing rapid infusion of fluids and medications to patients in need.



The OnControl™ Bone Marrow System provides the first significant advance in bone marrow procedures in over 50 years. In bone marrow biopsy and aspiration procedures, the same arduous manual process has been used for decades. These manual procedures can be lengthy and difficult for both the patient and the clinician – for the patient, due to the pain involved; and for the clinician, due to the strenuous method of obtaining the bone marrow. Patients appreciate the speed and precision of the OnControl System, which allows them to drastically decrease the amount of time spent in discomfort. For the clinician, a faster, easier way to perform bone marrow procedures and reliably capture samples can lead to improved diagnostic outcomes, time savings, reduced provider injury and a more satisfied patient.

Vidacare's OnControl™ Bone Access System, launched in 2010, offers an alternative route to access the vertebrae in spinal procedures such as vertebroplasty.

Vidacare's technology platform, with its patented power driver and needle technology, enables medical professionals to bypass the strenuous and often painful process of manual insertion and access the intraosseous space for a number of medical and diagnostic procedures.



MILESTONES

- 2000 – Dr. Larry Miller and research team work to develop Vidacare’s patented technology platform
- 2001 – Vidacare Corporation is established in San Antonio, Texas
- 2004 – FDA 510(k) clearance of EZ-IO[®] Intraosseous Infusion System’s power driver and needle set for use in adults
- 2005 – FDA 510(k) clearance of EZ-IO needle set for pediatric use
- 2005 – American Heart Association revises its Advanced Cardiac Life Support (ACLS) guidelines to recommend IO as first alternative to peripheral intravenous lines (IVs)
- 2005 – FDA 510(k) clearance of EZ-IO insertion in proximal humerus (shoulder) for vascular access
- 2006 – European Resuscitation Council (ERC) revises its guidelines to recommend IO as first alternative to peripheral IVs
- 2006 – International Liaison Committee on Resuscitation (ILCOR) revises its pediatric guidelines to recommend IO as first alternative to peripheral IVs
- 2006 – FDA 510(k) clearance of OnControl[™] Bone Marrow System for bone marrow aspiration
- 2006 – Vidacare opens European office in United Kingdom
- 2007 – National Association of EMS Physicians endorses intraosseous access as alternative to traditional IVs
- 2007 – FDA 510(k) clearance of EZ-IO sternal device
- 2007 – EZ-IO product adapted for military use in sternal site
- 2007 – FDA 510(k) clearance of EZ-IO insertion in distal tibia (ankle) for vascular access
- 2007 – FDA 510(k) clearance of OnControl Bone Marrow System for bone marrow biopsy
- 2007 – Vidacare B. V. incorporated for international operations
- 2008 – Vidacare releases the 45mm EZ-IO needle set for patients requiring a longer needle for vascular access
- 2008 – FDA 510(k) clearance of OnControl[™] Bone Access System for use in vertebroplasty
- 2009 – Infusion Nurses Society (INS) endorses intraosseous access as alternative to traditional IVs, and supports its use by registered nurses
- 2009 – Emergency Nurses Association (ENA) announces support of INS position paper endorsing role of IO
- 2009 – OnControl Bone Marrow System is commercially available



MILESTONES

- 2009 – Vidacare relocates corporate headquarters to a 17,000 square foot space in North San Antonio (Shavano Park)
- 2009 – FDA clears EZ-IO for use in “medically necessary” situations
- 2009 – Vidacare B. V. headquarters established outside of Amsterdam
- 2010 – American Association of Critical-Care Nurses (AACN) announces support of INS position paper endorsing role of IO
- 2010 – OnControl™ Bone Access System is commercially available
- 2010 – Nursing Consortium releases consensus paper recommending IO access as alternative to peripheral or central IV access in various settings
- 2010 – One millionth EZ-IO Intraosseous Infusion System needle sold
- 2010 – Vidacare Corporation increases its direct sales force and brings all three products under the direct sales model
- 2011 – OnControl Bone Marrow System receives New Device Category for Pass Through Payment from Center for Medicare and Medicaid to facilitate physician reimbursement



AWARDS/RECOGNITION

- Vidacare's technology platform received the Gold Medical Design Excellence Award during the Medical Design & Manufacturing East 2005 Conference. *Recognizes contributions and advances in the design of medical products.*
- The Association of University Technology Managers (AUTM) included the EZ-IO® product system by Vidacare in the second edition of its prestigious AUTM Better World Report,™ "Technology Transfer Works: 100 Innovations from Academic Research to Real-World Application." *AUTM is a nonprofit professional association with membership of more than 3,600 intellectual property managers and business executives from 45 countries. The association's mission is to advance the field of technology transfer, and enhance the ability to bring academic and nonprofit research to people around the world. The EZ-IO is one of just 15 medical applications included in this edition.*
- Vidacare was a 2007 recipient of the Tibbetts Award for achievement in technological innovation with the EZ-IO system. *The Tibbetts award is given to a company that has shown success resulting from the Small Business Innovation Research (SBIR) program's funding.*
- Vidacare was honored by the Independent Medical Distributor's Association (IMDA) with the 2007 Vendor of the Year Award in recognition of Vidacare's innovative EZ-IO product system. *The award acknowledges a company's ability to bring truly innovative technologies to health care providers through a faster, more cost-effective process. Vidacare is the first manufacturer to win this award.*
- Vidacare's EZ-IO Intraosseous Infusion System was selected as the sole 2008 Gold Technology Innovation Award winner from *The Wall Street Journal*. *This annual publication by The Wall Street Journal identifies the country's most innovative technologies for the past year.*
- Vidacare Corporation was named a top five finalist for the World Technology Award for Health & Medicine from the World Technology Network in July 2009. *The World Technology Awards are presented by the World Technology Network, in conjunction with TIME Magazine, CNN, Fortune Magazine and Science Magazine/AAAS, among others, to showcase extraordinary innovation on a global scale with great long-term significance.*



EXECUTIVE TEAM AND BIOS

Mark P. Mellin

President and Chief Executive Officer

Mr. Mellin brings a wealth of experience to the Vidacare executive team as a veteran in the biotechnology industry possessing deep expertise in mergers and acquisitions, capital raising and public company operations. A San Antonio native for over 40 years, Mr. Mellin currently serves as the audit committee chairman of the board of directors for Rackspace Hosting, Inc. Previously, Mr. Mellin was Senior Vice President and Chief Financial Officer of Ilex Oncology and managed the financial aspects of the sale of the San Antonio-based company to Genzyme Corporation for \$1 billion. Prior to that, he was the Managing Partner of the San Antonio office of Arthur Andersen LLP. Mr. Mellin holds a BBA in accounting from the University of Texas and has been a Certified Public Accountant since 1984.

Michael Voss

Chief Operating Officer

Mr. Voss' 20 years of experience includes executive leadership positions at medical device firms in the cardiology, vascular access, oncology and peripheral vascular arenas, with executive and managerial marketing and sales leadership with organizations including Bard Access Systems, Cordis Cardiology (a Johnson & Johnson company) and Boston Scientific. Mr. Voss holds an MBA from the Kellogg School of Management at Northwestern University and is a graduate of Georgia Southern University. Prior to entering the medical device industry, Voss served as a Captain in the U.S. Army.

Rick Mangum, CPA

Vice President

Finance and Corporate Controller

Rick Mangum brings 30 years of senior leadership experience in finance, accounting and administration. With ten years of experience at Clear Channel serving as VP Finance and Accounting, Mangum was responsible for accounting, budgeting, forecasting, financial reporting and compliance for 170 markets and 900 stations with approximately \$4 billion revenue. He also served as Chief Financial Officer for KellyUSA, PhyCor Inc and Baptist Health System. Mr. Mangum holds an MBA from The University of Texas at Austin where he also received his B.A. in Accounting. Mangum has been a Certified Public Accountant since 1982.



Larry J. Miller, MD

Founder

Chief Medical Officer

Dr. Miller has treated more than 120,000 emergency patients since training at Chicago's Cook County Hospital, where he earned the Intern of the Year Award. For ten years he was Chairman of Emergency Medicine at the five Baptist Health System Hospitals in San Antonio. He is currently the medical director for 10 Emergency Medical Services organizations. Dr. Miller brings a rich experience of clinical medicine (30 years as an emergency medicine specialist and opinion leader), in-depth knowledge of intraosseous physiology (directing intraosseous research, human clinical trials and FDA device approval), and business management (20 years directing product development, engineering, manufacturing, and marketing, as well as President and CEO of three medical device companies). Dr. Miller developed an extensive patent portfolio for the Vidacare technology and received FDA clearance for 15 indications.

Jim Thomsen

Co-Founder and Executive Vice President

Vascular Access Sales

Mr. Thomsen is a seasoned medical device sales and marketing executive, with over 40 years of experience in health care and medical devices. With 12 years experience specifically in intravenous access products, he was consistently in the top 5% in sales with Jelco, a division of Johnson & Johnson; US Surgical (sales from \$3 million to \$1 billion in 5 years); Vicra, a division of Baxter; Pioneer Viggo, a division of BOC; and Intertech Resources. Highly entrepreneurial, Mr. Thomsen founded his own medical device specialty distribution company (Intermedway) in 1989 and grew it to \$244 million in six years. He later raised \$65 million for the creation of a rollup of Intermedway members (Critical Care Concepts) that was later sold to Cardinal Health. A knowledgeable marketer and innovative thinker, he has consistently exceeded corporate goals. Mr. Thomsen received his B.A. in History and English at McMurry University in Abilene, TX.



BOARD OF DIRECTORS

Chairman - William Sanger

Mr. Sanger has provided leadership to the health care industry for over 30 years and is currently the Chairman and CEO of Emergency Medical Services Corporation. He has successfully led multi-system hospitals, including ambulatory care, post-acute services (nursing homes), physician management companies, freestanding diagnostic and treatment centers, and managed care entities. Mr. Sanger co-founded a publicly traded health care company and established one of the first managed care organizations. His expertise in strategic positioning for health care entities is nationally renowned. He has provided turnaround and merger and acquisition (M&A) consultation to private, publicly traded, and not-for-profit domestic and international health care companies.

Wilson Allen

Mr. Allen is currently a Managing Director of Westlake Securities, an Austin, Texas-based investment bank that serves the middle market with an emphasis for regional corporations and emerging companies. Since 1995, he has provided leadership and guidance to early-stage companies with unique intellectual property in large markets, assisting with capital, corporate structure, strategy, and developing management teams. Prior to 1995, he served as senior equity trader and member of the asset allocation group for a \$2 billion money management firm, Eagle Management. He has served on numerous for profit and non-profit Boards throughout his career. Mr. Allen earned a BA from the University of Texas and an MBA from Pepperdine University.

James M. Kenny

Mr. Kenny is currently a managing partner of Voltron Ventures, a venture capital firm specializing in high tech/med tech investments. Mr. Kenny has been involved in private equity ventures and investments for the last ten years and previously served as vice president of Signature Capital. At Signature Capital, he was involved in the formation and funding of several start-up companies, including Additch, Acoustic Technologies, NetNumber and VIRxSYS. Most recently, Mr. Kenny co-founded and serves on the board of directors of Quickfilter Technologies, a fabless semiconductor company specializing in programmable digital filters for signal processing. Mr. Kenny received a BA and MBA from Georgetown University. He serves on the board of regents for Georgetown University and on the board of directors for the NYU Cancer Center.

Jack McMullen

Mr. McMullen is currently the Managing Principal of Cambridge Meridian Group, Inc., a strategy-consulting firm that serves Fortune 500 and technology-based companies. Mr. McMullen previously taught business strategy at Harvard Law School. He serves, or has served, on the Boards of three NASDAQ-listed technology companies as well as 12 other privately funded, chiefly technology-oriented companies. From 1993 to 1997 he was an informal advisor to Senator Bradley (D-NJ). In 2004 he was the Republican nominee for the United States Senate from Vermont. He is a Navy veteran who served on the staff of Admiral Rickover overseeing the retrofit of advanced technology reactors into the Navy's nuclear fleet. He is a Phi Beta Kappa graduate of Columbia University in Applied Physics and Engineering and received a JD with Honors from Harvard Law School and an MBA with High Distinction from Harvard Business School, where he was elected a First Year Baker Scholar.



Robert G. Shepler

Mr. Shepler is currently a Managing Director of Telegraph Hill Partners, a private equity firm focused on medical devices, life science technology and health care companies. Mr. Shepler has been an investor and corporate transactions specialist for 30 years. He has served on numerous company boards and completed over 150 M&A and financing transactions. Prior to forming Telegraph Hill's predecessor firm in 1991, he was an officer with Merrill Lynch in their corporate finance division. In addition to Vidacare, his current directorships include Estech, Applied Precision, and LDR Spine.

Harold L. Timboe, MD, MPH

Dr. Timboe is currently a family physician and physician executive. A Vietnam and Gulf War I veteran, he retired in 2002 as a Major General from the US Army after a distinguished career culminating as commander of Walter Reed Army Medical Center in Washington, DC. He has extensive experience in executive leadership of large, complex health systems, senior health policy positions, and is a decorated combat medical leader with several experiences in mass casualty situations and natural disasters, including the 9/11 Pentagon attack, anthrax letters, Indonesian tsunami, Hurricane Katrina, and the Haitian earthquake. After military service, he served for five years at his medical alma mater, The University of Texas Health Science Center at San Antonio as an Associate Vice President, Clinical Professor and Director, Center for Public Health Preparedness. General Timboe is a graduate of the United States Military Academy at West Point and the Army War College. He also has a Masters of Public Health from the University of Hawaii, and holds positions on the boards of several private companies as well as non-profit organizations. Harold and his wife, Donna, live in Bentonville, Arkansas, near their children and grandchildren, where he is a member of the Executive Council of the Soderquist Center for Leadership and Ethics.

James Tullis

Mr. Tullis is the founder and chief executive officer of Tullis Health Investors, a health care venture capital firm based in Stamford, Connecticut. Under his direction, the firm has invested in a portfolio of companies representing innovative concepts in pharmaceuticals, biotechnology, managed care, health insurance, health care information technology, logistics and distribution, and medical devices. Prior to establishing Tullis Health Investors in 1986, Jim worked as an analyst at Morgan Stanley where he managed health care investment research, focusing on pharmaceuticals and medical devices. During his tenure on Wall Street, he received many accolades, including recognition on the Institutional Investor All-Star list of Wall Street's top securities analysts. He was twice named #1 Drug Analyst, was featured on the Wall Street Week television program, and authored Wall Street's first research report on biotechnology. Jim is a graduate of Stanford University and earned an MBA from Harvard Business School. He currently serves on the Boards of several public and private companies.



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