InVivo Therapeutics Announces Contemporary Thoracic SCI Registry Study (the "CONTEMPO Registry Study") Findings

March 19, 2018

-Validates previously established Objective Performance Criterion (OPC) –

CAMBRIDGE, Mass. (March 19, 2018) – InVivo Therapeutics Holdings Corp. (NVIV) today announced top-line findings from its CONTEMPO Registry Study, designed to provide comprehensive natural history benchmarks for Neuro-Spinal Scaffold™ clinical study results. The CONTEMPO study includes neurological recovery data from registries of spinal cord injury (SCI) patients with similar baseline characteristics to those in the INSPIRE study. Specifically, only patients injured between 2006 and 2016 and meeting inclusion and exclusion criteria similar to those in INSPIRE were included. Examples of such criteria include age (16-70 years), T2-T12 neurological level of injury (NLI), complete (AIS A), non-penetrating injury, acute neurological exam within 7 days of injury, and follow-up neurological exam at about 6 months post-injury. The results were presented by James Guest, M.D., Ph.D., CONTEMPO Principal Investigator and Professor of Neurological Surgery at the Miller School of Medicine and the Miami Project to Cure Paralysis in Miami, FL, at the 2018 Spine Summit, held in Orlando, FL.

A compilation of neurological recovery data from three established SCI registries was used for the CONTEMPO Registry Study, including the North American Clinical Trials Network (NACTN), European Multicenter Study about Spinal Cord Injury (EMSCI), and Spinal Cord Injury Model Systems. A total of 170 patients were included from the three registries: 12 individuals from NACTN, 64 from EMSCI, and 94 from Model Systems. AIS conversion rates at approximately six months post-injury varied from 16.7% – 23.4% across the three registries.

In two of the registries, there was a skew of the patient population to low (T10-T12) thoracic injuries, representing 46-47% of the registry population. This compares to just four out of sixteen patients (25%) in follow-up in the INSPIRE study with low thoracic injuries. Patients with low thoracic injuries are known to have the best prognoses, and the conversion rates were the highest in the low thoracic group in all three registries and the INSPIRE study. When all three registries were normalized to the INSPIRE patient population distribution across T2-T5, T6-T9 and T10-T12 injury groups, the normalized conversion rate for CONTEMPO registries ranged from 15.5%-20.6%.

"The CONTEMPO study represents a valuable compilation of neurological recovery data from three established SCI registries. This compilation, which is first of its kind, can help guide the development of future clinical trial protocols and aid in the interpretation of the safety and potential clinical benefit of new therapies," stated Dr. Guest.

"Given that published historical benchmarks for AIS conversion rates were used to establish the INSPIRE OPC of 25%, we were pleased to see that the CONTEMPO Registry Study results validated and supported our OPC," Richard Toselli, Chief Executive Officer, said. "The CONTEMPO Study will be an important component of our planned Humanitarian Device Exemption (HDE) regulatory submission, and we were pleased to have Dr. Guest present topline findings of the CONTEMPO Registry Study in Orlando."

About InVivo Therapeutics

InVivo Therapeutics Holdings Corp. is a research and clinical-stage biomaterials and biotechnology company with a focus on treatment of spinal cord injuries. The company was founded in 2005 with proprietary technology co-invented by Robert Langer, Sc.D., Professor at Massachusetts Institute of Technology, and Joseph P. Vacanti, M.D., who then was at Boston Children's Hospital and who now is affiliated with Massachusetts General Hospital. In January 2018, the company announced updated clinical evidence, including improvements in patients with acute spinal cord injury (SCI), from its INSPIRE study of the Neuro-Spinal Scaffold™. The publicly traded company is headquartered in Cambridge, MA. For more details, visit www.invivotherapeutics.com.

Safe Harbor Statement

Any statements contained in this press release that do not describe historical facts may constitute forward-looking statements within the meaning of the federal securities laws. These statements can be identified by words such as "believe," "anticipate," "intend," "estimate," "will," "may," "should," "expect" and similar expressions, and include statements regarding the Company's planned HDE regulatory submission and the value of the CONTEMPO study. Any forward-looking statements contained herein are based on current expectations, and are subject to a number of risks and uncertainties. Factors that could cause actual future results to differ materially from current expectations include, but are not limited to, risks and uncertainties relating to the Company's ability to successfully identify financing alternatives and raise the capital necessary to undertake the second pivotal trial, the ability to successfully open additional clinical sites for enrollment and to enroll additional patients if such trial is initiated; the timing of

the Institutional Review Board process; the Company's ability to obtain FDA approval to commercialize its products; the Company's ability to develop, market and sell products based on its technology; the expected benefits and efficacy of the Company's products and technology in connection with spinal cord injuries; the availability of substantial additional funding for the Company to continue its operations and to conduct research and development, clinical studies and future product commercialization; and other risks associated with the Company's business, research, product development, regulatory approval, marketing and distribution plans and strategies identified and described in more detail in the Company's Annual Report on Form 10-K for the year ended December 31, 2017, and its other filings with the SEC, including the Company's Form 10-Qs and current reports on Form 8-K. The Company does not undertake to update these forward-looking statements.