## Brain Trauma Foundation Publishes 4th Edition of Guidelines for the Management of Severe Traumatic Brain Injury September 21, 2016

Campbell, CA (September 21, 2016). Brain Trauma Foundation (BTF) announces the 4th Edition of the Guidelines for the Management of Severe Traumatic Brain Injury (Guidelines) is published online today, ahead of print, in the journal *Neurosurgery*. The Guidelines are the product of a partnership between Brain Trauma Foundation and the Pacific Northwest Evidence-based Practice Center at Oregon Health & Science University. Both organizations are part of the Brain Trauma Evidence-Based Consortium (BTEC), which Stanford University oversees with funding from the Department of Defense.

The Guidelines synthesize the most current available evidence about severe traumatic brain injury and translate that evidence into recommendations for medical professionals. A panel of national experts in neurosurgery, neuro intensive care and neuro trauma evaluated research studies and developed the evidence-based recommendations that constitute these guidelines. The newly released, updated 4<sup>th</sup> edition was reviewed for evidence-based integrity and endorsed by the American Association of Neurological Surgeons and the Congress of Neurological Surgeons.

## Impact of the Guidelines and Evidence-Based Medicine

"These guidelines, now in the fourth update, represent a continuous process of best practice evidence that has led to a 50% decline in severe traumatic brain injury deaths when put into practice. Every U.S. trauma center strives to meet the recommendations of these guidelines," explains Dr. Jamshid Ghajar, president of Brain Trauma Foundation and Clinical Professor of Neurosurgery at Stanford University School of Medicine.

"We are very grateful for all the neurosurgeons and other medical specialists who have freely contributed their knowledge and hard work and also thank the Neurotrauma and Critical Care section of the American Association of Neurological Surgeons and the Congress of Neurosurgeons for being our partner over the past 25 years."

Historically, the communities of neurosurgery and neuro-intensive care have been early pioneers and supporters of evidence-based medicine. The Guidelines continue to build on this foundation, offering evidence-based recommendations in order to clarify which aspects of practice currently can and cannot

be supported by evidence, to encourage use of evidence-based treatments that exist, and to promote creativity in treatment and research in areas where evidence does not exist.

In this 4th Edition of Brain Trauma Foundation's Guidelines, 189 studies were included as evidence about 18 topics. Changes from the prior edition include the addition of new topics, such as Decompressive Craniotomy, as well as revisions to existing recommendation on topics such as target blood pressure thresholds for TBI patients.

The BTF Guidelines were the first ever evidence-based guidelines in any branch of surgery in the early 1990s. Now these guidelines are translated and distributed around the world. Recently, China endorsed the guidelines after consulting with BTF's Chief of the Medical Advisory board, Dr. Ross Bullock from University of Miami.

Going forward, the Guidelines are transitioning to a Living Guideline model that includes ongoing monitoring of the scientific literature and updates to recommendations as soon as new evidence is available.

The executive summary of the Guidelines is available via *Neurosurgery* (click <u>here</u>), and the full Guidelines document can be viewed and downloaded from the Brain Trauma Foundation website (click <u>here</u>). Updates as part of the Living Guidelines will also be available at the Brain Trauma Foundation website.

## **Funding Acknowledgement**

The Guidelines are based in part upon work supported by the U.S. Army Contracting Command, Aberdeen Proving Ground, Natick Contracting Division. [NHRC BAA 13-001 #W911QY-13-R-0063 PI: Ghajar, Jamshid, Brain Trauma Evidence-based Consortium (B-TEC). The 3rd Edition of the Guidelines was published in 2007.

## **About Brain Trauma Foundation**

For over 30 years, Brain Trauma Foundation has been conducting innovative clinical research and developing evidence-based guidelines that improve outcomes for the millions of people who suffer from traumatic brain injuries every year. Led by Dr. Jam Ghajar, Brain Trauma Foundation is headquartered in Campbell, California.