Here, and elsewhere in this newsletter, are some of the teams who made it all possible



Hospital Interzonal General de Agudos 'Dr Oscar Alende', Argentina



















Tranexamic Acid for the reatment of Postpartum Haemorrhage (PPH)

Each year, worldwide about 530,000 women die from causes related to pregnancy and childbirth. Almost all of the deaths are in low and middle income countries. About 14 million mothers develop postpartum haemorrhage (PPH) each year and about 2% of them will die, death of about 2 to 4 hours.

The WOMAN trial aims to examine the effect of Tranexamic acid (TXA) on mortality and hysterectomy and other morbidities in 15,000 women with and Albania.

New hospitals are needed all over the world. Please urge your hospital Obstetric and Gynaecology department to take part. More information on the trial website

www.thewomantrial.Lshtm.ac.uk

HALT-IT TRIAL

(Haemorrhage Alleviation with Tranexamic acid - Intestinal System)

A large trial among patients with acute gastro-intestinal haemorrhage, of the effects of TXA on death and need for surgical intervention. Acute upper GI haemorrhage is one of the most common gastrointestinal emergencies. It is an important cause of mortality and morbidity in high, middle and low income countries. with an average interval from onset to Lower GI haemorrhage has an incidence of 20-30 cases per 100,000 people per year and a case fatality of 10-20%.

The HALT-IT trial will determine reliably the effect of TXA on mortality, morbidity (rebleeding, surgical intervention, blood clinically diagnosed PPH. A pilot phase of transfusion, risk of non-fatal vascular this trial has started and 400 women have events) and health status in patients with been randomised in Nigeria, Cameroon acute upper gastrointestinal haemorrhage.

> The trial aims to randomise 10,000 adult patients with clinical diagnosis of GI

> More information will be available in the near future, but do let us know now if you might be interested in taking part.

CRASH-3 Efficacy Trial

(Clinical Randomisation of an Antifibrinolytic in Significant Head Injury)

An efficacy study of tranexamic acid in traumatic intracranial bleeding.

Traumatic brain injury (TBI) is a leading cause of death and disability. Intracranial bleeding is common in TBI and is associated with increased mortality and disability. Because progression of intracranial bleeding is common and worsens outcome, early intervention to reduce the progression has considerable therapeutic notential.

The trial aims to recruit 600 adult TBI patients with CT scan evidence of intracranial bleeding and no other evidence of significant traumatic bleeding. Two CT scans will be taken for each participant, a baseline (pre-randomisation) scan and a follow-up scan 24-48 hours later. Scans will be sent to the TCC and compared by radiologists at Edinburgh University.

More information will be available in the near future, but do let us know now if you might be interested in taking part.

NEWSLETTER

Issue 16 - May 2010



THE TIMES OF INDIA LA NACION Mola Bort YOU DID IT!

"Cheap drug could save 100,000 lives" - the five words and one number that sum up the efforts of the hundreds of CRASH-2 collaborators from hospitals around the world. This was the headline that hit the world's news in June 2010, following the publication of the CRASH-2 trial results in the Lancet medical journal.

And the most important thing about this particular headline is that it is completely true. Thanks to the superb efforts of the CRASH-2 collaborators we now have reliable scientific evidence that a simple, inexpensive and widely practicable treatment saves lives in trauma patients. Trauma doctors everywhere are now discussing how tranexamic acid can be incorporated into trauma treatment guidelines.

Compared to most lifesaving drugs tranexamic acid is very cheap. The results of the trial are currently

FREELY AVAILABLE TO ALL TheLancet.com

CRASH-2: tranexamic acid and trauma patients



In an Article, the CRASH-2 Trial Collaborators assess the effects of early administration of a short course of tranexamic acid on death, vascular occlusive events, and the receipt of blood transfusion in trauma patients with or at risk of significant haemorrhage. Jerrold H Levy offers an analysis of the study in a Comment. Translated abstracts available in: Chinese, Hindi and Spanish

www.thelancet.com/crash-2

being studied by health economists to work out cost effectiveness – but already it is clear that tranexamic acid ranks as one of the most inexpensive ways to save a life in the history of healthcare.

And it could save 100,000 lives. Each year an estimated 600,000 trauma patients bleed to death in hospitals around the world. The CRASH-2 trial has shown that tranexamic acid reduces the risk of death from bleeding by about one sixth. This means that the widespread use of this drug by emergency physicians could cut the death toll by 100,000 every year.

The most worrying word in the headline is the word "could." The headline does not say "will." There is a huge gap between clinical research and clinical practice. It can take a decade for an effective treatment to be taken up in routine medical care. CRASH-2 collaborators can help reduce this lethal time lag by making sure that tranexamic acid is incorporated into their own trauma protocols, by presenting the results at local and national trauma meetings, by writing editorials in medical journals and newspapers, and a whole host of other ways.

The co-ordinating centre has applied to the World Health Organization to include tranexamic acid on the list of essential medicines. Please write to your own regional WHO offices in support of this application. There is much to celebrate, but much remains to be done.

And just in case you felt that you had made your contribution to medical research and can now put your feet up and relax - CRASH-3 is coming...

Watch this space!

Total recruitment 20,211 On target – on time

Trials Coordinating Centre

Clinical Trials Unit, Room 180, LSHTM, Keppel Street, London WC1E 7HT, UK tel +44(0)20 7299 4684, fax +44(0)20 7299 4663, email crash@Lshtm.ac.uk WWW.CRASH2.LSHTM.AC.UK

Listed here are all the hospitals who randomised patients into the trial, in ranking order. Congratulations and huge thanks to all the teams for your tremendous work!

More than 1,000 patients

Hospital Universitario San



Mataria Teaching

1-10 patients Hospital Regional Rio Grande, Argentina Centre Hospitalier Regional de Namur, Belgium Hospital Alcivar, Ecuador Nazareth Hospital, India Fukuoka Univ Hospital, Japan NsP Poprad, Slovakia Roi-Et Hospital, Thailand Bali District Hospital, Cameroon Hospital Univ Departamental Narino, Colombia Hospital Provincial docente VI Lenin, Cuba Ganga Hospital, India Muhammadiyah Lamongan Hospital, Incionesia Imam Hosain Hospital, Iran Hospital Univ del Valle, Colombia Vadamalayan Hospitals, India Hospital General Ecatepec Las Americas, Mexico Hospital Ramon y Cajal de Madrid, Spain Phrae Hospital, Thailand Frenchay Hospital, UK Hull Royal Infirmary, UK Hospital General la Perla, Mexico Hospital de Apoyo de Sullana, Peru Hospital IV ESSALUD Huancayo, Peru

Royal Sussex County Hospital, UK Hospital 4 de Junio Dr Ramon Carrillo, Argentina Hospital Dr RR Zambrano, Ecuador Hospital Municipa Los Olivos, Peru NsP JA Reiman, Slovakia Derby Hospitals NHS Trust, UK Nchanga North General Hospital, Zambia Hospital Castro Rendon, Argentina Hospital San Martin de La Plata, A gentina Sir Charles Gairdner Hospital, Australia Hospital Univ de Neiva, Colombia Devadoss Multispeciality Hospital, India KIOT Hospital, India Hospital Jose Cayetano Heredia, Peru Hospital Nacional CA Seguin Escobedo, Peru Bedford Hospital NHS Trust, UK

Royal Liverpool Univ Hospital, UK

John Hunter Hospital, Australia

Hospital Municipal Dr L Lucero, Argentina

Hospital Manuel Uribe Angel, Colombia

Effia Nkwanta Regional Hospital, Ghana

Hospital Nacional Arzobispo Loayza, Peru

Countess of Chester Hospital, UK

Baby Memorial Hospital, India Bethany Hospital, India Suretech Hospital, India Surya Hospital, India Maiduguri UTH, Nigeria Hospital Nacional Dos de Mayo, Peru Colchester General Hospital, UK Royal Lancaster Infirmary, UK Worthing Hospital, UK Hamilton General Hospital, Canada Clinica De Espec Medicas San Gregorio, Ecuador Apollo Clinic Varanasi, India Fortis Escorts Hospital, India Gokul Hospital & Trauma Centre, India international Hospital Assam, India Lirenne Multispeciality Hospital, India Meenakshi Mission Hospital India MOSC Medical College Hospital, India MS Ramaiah Memorial Hospital, India Savkhedkar Hospital, India Shanti Mukand Hespital, India Ampang Hospital, Malaysia Hospital Gen de Ecatepec Dr JM Rodriguez, National Orthopaedic Hosp tal Igbobi, Nigeria Hospital Nacional Cayetano Heredia, Peru National Neuroscience Institute, Singapore George Provincial Hospital, South Africa Hospital Univ Germans Trias i Pujol, Spain Darent Valley Hospital, UK Hope Hospital, UK Northern General Hospital, UK Hospital Interzonal Gen de Agudos Dr O Alende, Argentina Bafut District Hospital, Cameroon Fundong District Hospital, Cameroon St John of God Medica Centre, Cameroon Saint Theresa's Hospital, Ghana Shri KM Memorial Jain Hospital, India Usha Hospital, India Kapenguria District Hospital, Kenya Univ of Nigeria Teaching Hospital Enugu,

Klinicki Centar Srbije, Serbia

Hospital Torrecardenas, Spain

Faculty Hospital FD Roosevelta, Slovakia

Hospital Univ Virgen de la Victoria, Spain



Hospital Luis Vernaza, Ecuador

10-19 patients

Apex Hospital Bhopal, India Rayong Hospital, Thailand Res Inst for Special Surgery & Trauma, Czech Rep Dr Jeyasekharan Medical Trust, India Himalayan Institute of Medical Sciences, India Sogakope District Hospital, Ghana Apollo Gleneagles Hospitals, India Civil Hospital Gandhinagar, India Sukhdev Raj Soin Hospital, India Hospital Nacional Sergio E Bernales, Peru Sancheti Inst for Orthop & Rehab, India St lames Hospital, India King Khalid Nation Guard Hospital, Saudi Arabia Leicester Royal Infirmary, UK Nottingham Univ Hospitals NHS Trust, UK Spitali Civi Durres, Albania Methodist Hospital Wenchi, Ghana Al Shifa Hospital, India Anant Institute of Medical Sciences, India FMC Birnin-Kebbi, Nigeria United Hospital Limited, Bangladesh Hospital General Calixto Garcia, Cuba Vinavaka Mission Hospital, India lospital Univ Virgen del Rocio, Spain Hospital Antonio Luace Iraola, Cuba Hospital Naval Guayaguil, Ecuador Gauhati Hospital, India Univ Hospital of the West Indies, Jamaica Abia State UTH, Nigeria Wesley Guild Hospital, Nigeria Nepean Hospital, Australia Bamenda Provincial Hospital, Cameroon Hospital Civil de Ipiales, Colombia Krishna Hospital Karad, India Ruby Hall Clinic, India Shreejee Hospital, India Logman Medical Center, Iran

FMC Umuahia, Nigeria

More than 500 patients



20-49 patients

Sanjeevani Hospital, India

Kamineni Hospital, India

Sri Sakthi Hospital, India

Sushrut Hospital, India

Erfan Hospital, Iran

FMC Makurdi, Nigeria

GM Hospital Ltd, India

Lagos State UTH, Nigeria

Chikitsa Hospital, India

Apollo Health City, India

Spedali Civili di Brescia, Italy

Neuro Center Gola Ghat, India

NSCB Medical College, India

BGS Global Hospital, India

Chettinad Hospital, India

FMC Yenagoa, Nigeria

Clinica Santa Ana, Peru

Clinica La Estancia, Colombia

Royal London Hospital, UK

Calabar UTH, Nigeria

Abuja UTH, Nigeria

Uyo UTH, Nigeria

GMC Nagpur, India

Bhattacharya Orthopaedic Res Centre, India

LAUTECH Teaching Hospital, Nigeria Sint-Vincentius Hospital, Belgium

Univ of Malaya Medical Centre, Malaysia

All India Institute of Medical Sciences, India

GMC New Civil Hospital Surat, India

Usmanu Danfodiyo UTH, Nigeria

Hospital Habib Thameur, Tunisia

Hospital San Rafael Tunja, Colombia

Nyinahin Government Hospital, Ghana

Dr Soetomo General Hospital, Indonesia

Hospital Tengku Ampuan Rahimah, Malaysia

Cipto Mangunkusumo Hospital, Indonesia

Univ Hospital of North Staffordshire, UK

Hospital de Ninos Dr RG Elizalde, Ecuador

Fundacion Hospital San Jose de Buga, Colombia

Krishna Surgical Hospital & Trauma Centre, India

Nizam's Institute of Medical Sciences, India

Institute of Critical Care Medicine, Georgia

Hospital Angel Cruz Padilla, Argentina

Sir Sayajirao General Hospital, India

Azienda Ospedaliera di Parma, Italy

Hospital Miguel Enriquez, Cuba

Seventh Day Adventist Hospital, Nigeria

Goyal Hospital Jodhpur, India

Lampang Hospital, Thailand

FNsP Ruzinov, Slovakia

Hospital La Caleta, Peru

Niramay Hospital, India

Kenyatta National Hospital, Kenya

Apex Neurotrauma & Superspec Hospital, India

St Theresa's Catholic Medical Centre, Cameroon

Nnamdi Azikiwe Univ Teaching Hospital, Nigeria

National Orthopaedic Hospital Enugu, Nigeria

Aswan Teaching Hospital, Egypt

Suez Canal University,

40 countries 249 hospitals **20,211** patients **STAR ACHIEVEMENT**

50-99 patients

Clinica las Americas, Colombia Saiful Anwar General Hospital, Indonesia Hospital Univ Science, Malaysia Mansarovar Hospital, India Hospital Prov Docente MA Domenech, Cuba Hospital General de Medellin, Colombia Hospital San Felix, Colombia Hospital Nacional Rosales, El Salvador PGIMS Rohtak, India Goyal Hospital Jalna India Nemazi Hospital, Jrar Baptist Medical Centre, Nigeria Or George Mukhari Hospital, South Africa Hospital Univ "Arrialdo Milian Castro", Cuba Korle By Teaching Hospital, Ghana GMC Chandigarh, India Oberai Hospital, India ajeev Gandhi Memorial Hospital, India

Hospital Univ Dr GA Lima, Cuba Tombel District Hospital, Cameroon Hospital Univ Del Caribe, Colombia Muhimbili Ørthopaedic Institute, Tanzania Calicut Medical College Hospital, India Krishnamai Foundation's NIKOP Hospital, India

Hospital Gen de Uruapan Dr PD Martinez, Hospital Univ San Jorge, Colombia

St Stephen's Hospital, India Lusaka UTH, Zambia King Khalid Univ Hospital, Saudi Arabia Ilorin UTH, Nigeria

Renji Hospital, China Hospital Abel Santamaria Cuadrado, Cuba

Government Rajaji Hospital, India Medical College Trivandrum, India Enugu State UTH, Nigeria Sungai Buloh Hospital, Malaysia

Tbilisi State University Clinical Hospital 'I Javakhishvili', Georgia

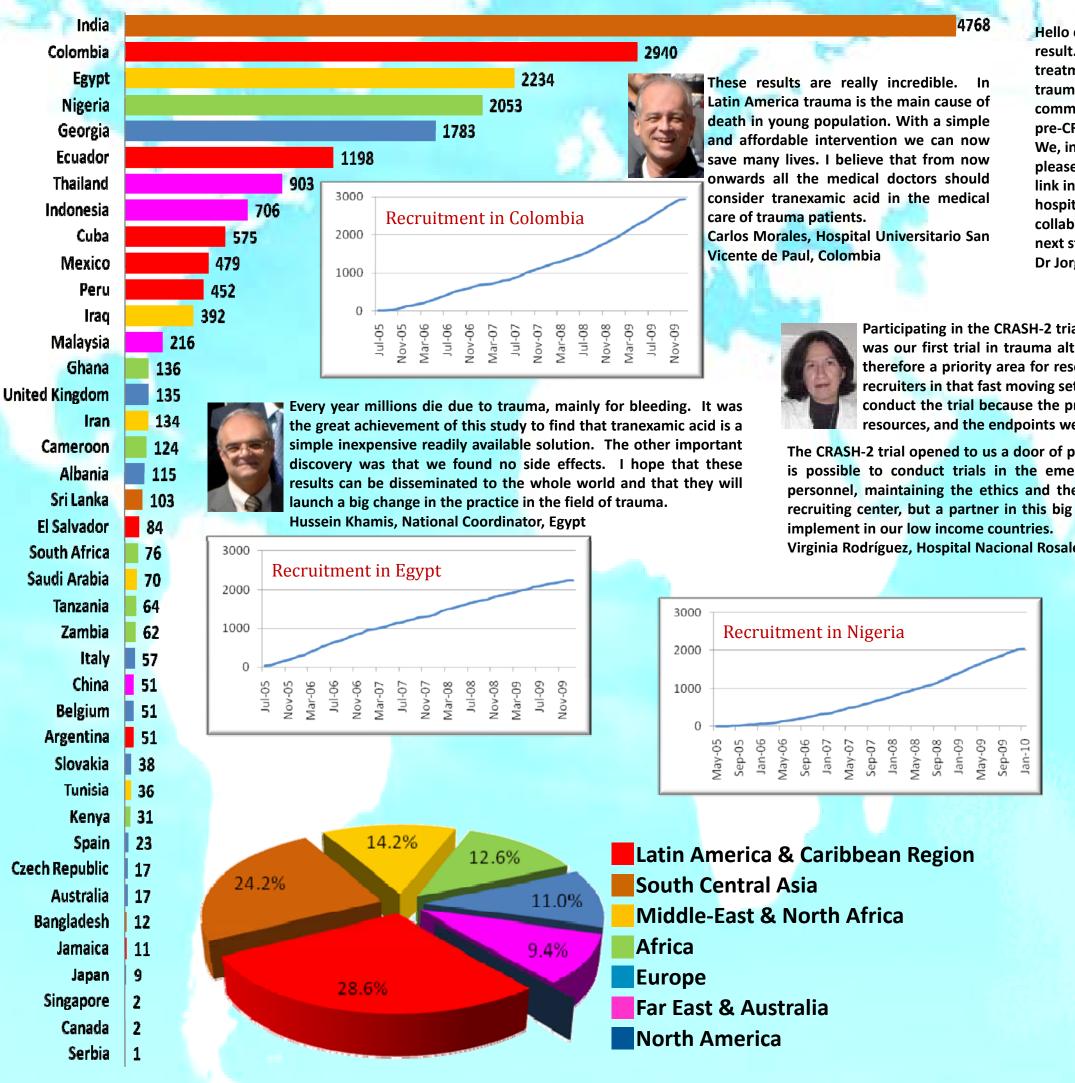
> **Tbilisi First Hospital University Clinic, Neurosurgery Center, Georgia** Masters

100-499 patients National Hospital Abuja, Nigeria Khon Kaen Regional Hospital, Thailand Medical Trust Hospital Kochi, India Hospital Univ San Jose de Popayan, Colombia Diwaniyah College of Medicine, Iraq Tbilisi City Hospital #1, Georgia Christian Med Coll Ludhiana, India Soebandi Hospital Jember, Indonesia Aditya Neuroscience Centre, India Benin UTH, Nigeria Sri Sai Hospital, India Sanglah General Hospital, Indonesia Hospital Pablo Tobon Uribe, Colombia Care Hospital, India Hospital San Andres de Tumaco, Colombia Hospital General Regional 25, Mexico Tbilisi State Medical Univ ER Dept, Georgia Fundacion Clinica Valle del Lili, Colombia Hospital Gustavo Rovirosa, Mexico Hospital Regional Docente de Trujillo, Peru North Bengal Neuro Research Centre, India Sheth VS General Hospital, India LTM General Hospital, India Obafemi Awolowo UTH, Nigeria Hospital Nacional Hipolito Unanue, Peru Irrua Specialist Teaching Hospital, Nigeria GMC Jammu, India MKCG Medical College, India Olabisi Onabanjo UTH, Nigeria Pattani Hospital, Thailand Hospital Clin-Quirurgico Doc Saturnino Lora, Cuba Hospital Jose Carrasco Arteaga, Ecuador Christian Medical College Vellore, India UCH Ibadan, Nigeria KLE Hospital, India Suratthani Hospital, Thailand NKP Salve Inst Lata Mangeshkar Hospital, India Hospital General Univ CM de Cespedes, Cuba Sanjivani Hospital, India Bhumibol Adulyadej Hospital, Thailand Parkar Hospital, India Ahmadu Bello UTH, Nigeria

Jeevan Jyoti Hospital Centre, India

National Trauma Centre Hospital, Albania

National Hospital, Sri Lanka



Hello everyone who made possible this magnificent result. A new therapeutic arm will be added to the treatment protocols of the initial management of trauma. Since the success of the mega trial the medical community of the world will start to talk about the pre-CRASH2 age and this new post-CRASH2 age.



We, in the Southernmost hospital in the world, are very proud and pleased to have participated through me who was only one more link in this study. We send our congratulations to the whole hospital community, to the Coordinating Centre and all the collaborators in the world. A fraternal embrace to all - until the next study.

Dr Jorge Omar Balbi, Hospital Rio Grande, Argentina

Participating in the CRASH-2 trial was an exciting and challenging experience. Exciting, as it was our first trial in trauma although we have an overload of trauma patients. Trauma is therefore a priority area for research and the challenge was to engage trauma surgeons as recruiters in that fast moving setting where life and death depend on time. We were able to conduct the trial because the protocol was designed to adjust to any setting, regardless of resources, and the endpoints were objective and measurable without high technology.

The CRASH-2 trial opened to us a door of possibilities for research in trauma and the conviction that it is possible to conduct trials in the emergency setting without big efforts from the health care personnel, maintaining the ethics and the data quality. The central team made us feel not only a recruiting center, but a partner in this big effort from which the evidence will be useful and easy to

Virginia Rodríguez, Hospital Nacional Rosales, El Salvador

CRASH-2 is a properly conceived, carefully planned and wonderfully executed massive trial by the CRASH Trials Co-ordinating Centre, which gave a very valuable verdict to humanity. The National co-ordinators around the world responded extremely well with participation and made it a reality. As a national co-ordinator of India, the top



R R Ravi, National Coordinator, India





I am very proud to be associated with the CRASH2 trial and particularly because the hospitals in India recruited the largest number of patients. The results are particularly important in India where thousands die of road traffic crashes and polytrauma.

Yashbir Dewan, Christian Medical College Ludhiana, India



Colombia









Trauma is a big problem in Albania so it was a great opportunity for us to participate in the CRASH2 trial. We now know that we can save many lives, and as trauma affects mostly the young active generation, the importance of these results will be even greater. I am happy to use these results in practice.

Fatos Olldashi, National Coordinator, Albania



We are a small island but we are proud to have contributed to this important international trial that will have a great external validity because of the characteristics of its design.

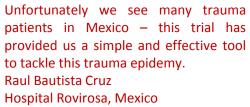
Maria Acelia Marrero CENCEC (national coordinator), Cuba

We are very happy to have a new treatment for trauma patients. We believe that we will be able to save many lives. From now onwards, tranexamic acid should become standard treatment for trauma patients and bleeding. Mario Izurieta, National Coordinator, Ecuador



Trauma is a leading cause of death in Nigeria so these results will be of great value to our patients. I am happy to disseminate the results in my country in order to reduce death. Edward Komolafe

National Coordinator, Nigeria



It has been a great honour to participate in such an important trial that will change the care of trauma patients and will save many young lives. Jorge Herrera Hospital Universitario San Jose de Popayan



Nigeria

Hospital Castro Rendon, Argentina

It was difficult to enrol patients at the start, but with the firm commitment of my coinvestigators we have managed to recruit patients to contribute significantly to this worldwide trial. Thus, I would say my team here in HUSM has finished the trial on a

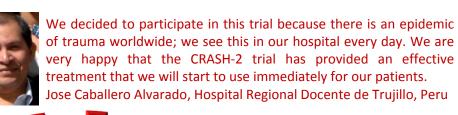
Baharudin Abdullah, Hospital University Science Malaysia



St Theresa's Catholic Medical Centre, Cameroon

The CRASH2 trial was an exciting investigation into whether a relatively cheap established elective drug could be used in the highly complicated situation of haemorrhage associated with major trauma. The trial pushed the barriers with regards to research in patients who lack capacity in the acute setting but has opened the way for further studies in the acutely ill population. It has been challenging but very satisfying. I hope that the results of the trial show that a simple drug can make a difference to an important patient population.

Mark Nash, University Hospital of North Staffordshire, UK





Hospital General Universitario CM de Cespedes, Cuba

We have made history in medical science and this finding is very important to trauma patients. Trauma is a growing problem in India where a large number of deaths of young adults occur due to bleeding. This cheap and available drug will be able to save a lot of lives. Sanjay Gupta, Sri Sai Hospital, India

I am pleased to be associated with the CRASH2 trial. This cheap and available drug reduces morbidity and mortality significantly and I recommend for it to be added to treatment protocol for all patients that are bleeding after road traffic crashes. Oluwole Olaomi, National Hospital Abuja, Nigeria

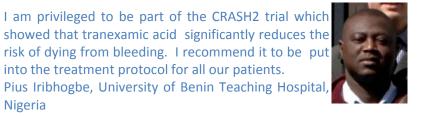




It was very important for Georgia to participate in the CRASH2 trial. Together with the team worldwide we found these amazing results and can save hundreds of lives. Fantastic!

Tamar Gogichaishvili, National Coordinator, Georgia

njury is a major health problem globally and also in the Middle East and Egypt, creating also economical and social problems. The CRASH2 trial results will help reduce mortality, especially due to bleeding. Tranexamic acid will be effective for injury control in most countries in the world and especially in low and middle income countries. Hesham Elsayed, Suez Canal University, Egypt



Thousands of people die because of injuries and I am proud to be part

of the CRASH2 trial. The results show that tranexamic acid reduces

death by many thousands annually in the whole world. In India it will

save many thousands of young lives and should be taken up in all major

hospitals and peripheral hospitals in the country. The drug is safe and

available and I recommend for it to be put into the treatment protocol.

Congratulations to all the all collaborators, it is a great success to have done such a large trial in trauma. It will have a great impact in Colombia and worldwide.







Hospital Regional Docente de Trujillo, Peru

P V Ramana, Care Hospital, India

into the treatment protocol for all our patients.



The CRASH-2 trial is a robust and scientific response to a big problem such as trauma. The results of this trial will benefit patients worldwide world because it is affordable and as a generic drug it is available everywhere. This is a landmark study that will prevent thousands of young people dying of traumatic haemorrhage and it also shows the importance of conducting studies IN our countries FOR our countries. Jaime Miranda, National Coordinator, Peru