

Newsletter January - April 2012

Dear all,

We would like to inform you in this newsletter what we did at INRO since the beginning of 2012. The „Prehospital project“ is in its final year. It is hard to believe how fast the 5 years went by since 2008 when the project started.

Apart from this project, we are busy preparing another project proposal, in a consortium with other European research organizations that are active in the area of brain trauma. The large project proposal is within a call titled Prospective longitudinal data collection and Comparative Effectiveness Research for traumatic brain injury. It will be submitted to Framework Programme 7, granting scheme of European Commission in summer 2012.

At the same time we are writing scientific articles and taking part in international conferences, thus disseminating results of our work.

Activities implemented in January - April 2012 SUMMARY

▪ **Project Prehospital and early hospital care for patients** (detailed description see further) – ongoing, in the first phase 2008 – 2010 data on 448 patients have been collected and analyzed. Guideline for prehospital and early in-hospital treatment of TBI in Austria was developed and is being used in 16 participating centers since 1st Jan. 2011. In the period Apr.2011.-Apr.2012 second phase of data collection has been implemented.

▪ **FP7 proposal:** We are joining project proposal led by Andy Maas and EBIC on TBI, which is a response to European Commission call: Prospective longitudinal data collection and Comparative Effectiveness Research (CER) for traumatic brain injury (TBI). Several Austrian treatment centers will be involved in the project, thus we will continue in the successful collaboration that was established within the successful Austrian „Prehospital“ project and broaden our area of expertise to other countries. The project will be implemented under this call in all EU countries and at the same time also in the USA (led by Geoffrey T. Manley), within the US NIH granting scheme. It will be a great step forward for INRO to be part of such a large-scale project.

▪ Two scientific articles that we submitted were accepted in scientific journals, we have participated in several conferences.

INRO People

Currently, the team of INRO consists of:

Alexandra Brazinova, MD, MPH, PhD – President of Board of Directors

Prof. Walter Mauritz, MD, PhD – Vicepresident of Board of Directors

Research fellows:

Marek Majdan, DrPH, PhD

Johannes Leitgeb, MD

Veronika Rehorcikova, MS

Dagmara Mastelova, MS

Zuzana Sklenarova-Cernuskova, DrPH

Lucia Daubnerova, DrPH

Mag. Ingrid Wilbacher, PhD

Ivan Janciak, MS, PhD

Project Prehospital and early hospital care for patients with Severe Brain Trauma in Austria (2008-2013)

By April 2012 we have completed second round of data collection.

The project is funded by Austrian Ministry of Health and Austrian Trauma Insurance company (AUVA), data are collected by 16 hospitals in Austria.

All patient data will be analyzed in May and June 2012. Through the analysis we will see the impact of the recommendations we have developed with project participants in the middle of the project (end of 2010). The recommendations were developed based on the results of the analysis of the first round of patient data collected in 2009-10. The recommendations were adopted by the treatment centers as of 1 Jan.2011.

The implemented recommendations:

- Rapid transport to the best facility available
- CT scan prior to or immediately after trauma room admission
- Short interval between CT scan and start of neurosurgery
- Use of capnography in all patients who are ventilated
- Early use of TEG (trombelastography) to optimize coagulation (especially important in patients aged > 60 years)
- In volume therapy:
 - Avoid lactated Ringer's
 - Use of Ringer's or HES is recommended
 - Hypertonic NaCl should be considered in all patients with shock
- Adequate ventilation:
 - The goal is normoventilation
 - Hyperventilation must be avoided
 - Ventilation must be monitored by capnography
- Corticosteroids must not be used

In the fall 2012 the overall results of the project will be presented at the conference of the Austrian Ministry of Health.

Publications submitted in January-April 2012

Johannes Leitgeb MD, Walter Mauritz MD, PhD, Alexandra Brazinova MD, PhD, MPH, Ivan Janciak PhD, Marek Majdan PhD, Ingrid Wilbacher MSc, PhD, and Martin Rusnak CSc, MD, PhD:

Outcome after severe brain trauma due to acute subdural hematoma. *Journal of Neurosurgery*

Johannes Leitgeb MD, Walter Mauritz MD, PhD, Alexandra Brazinova MD, PhD, MPH, Ivan Janciak PhD, Marek Majdan PhD, Ingrid Wilbacher MSc, PhD, and Martin Rusnak CSc, MD, PhD:

Treatment of traumatic brain injury by neurosurgeons versus traumasurgeons. *Journal of Trauma*

Activities planned for the rest of 2012

„Prehospital project“:

May – June: data analysis, report to Austrian Ministry of Health

September: presentation of project results at the conference of the Ministry of Health

Conferences:

April 26-27: EMN Congress, Cluj, Romania

September: EUSEM conference, Turkey

Publications

• TBI and Public Health, Textbook, Trnava University, Slovakia

Project proposals

▪ European Commission call – FP7: Prospective longitudinal data collection and Comparative Effectiveness Research (CER) for traumatic brain injury (TBI) – Summer 2012

-In this project INRO will continue working with the selected Austrian centers in clinical effectiveness research, plus will be responsible for data collection from other Central and Eastern European countries. Altogether, all EU countries will join the data collection. The project of similar scale will be simultaneously implemented in the US within NIH grant.

-In March and April 2012 we have contacted hospitals in Central and Eastern Europe and in Balkans to find centers interested to participate in the project.

-We are closely collaborating with Andy Maas on development of project work packages that will involve INRO.

Thank you for your attention.

On behalf of the whole INRO team allow me to wish you all the best

Sasha

Alexandra Brazinova, MD, PhD, MPH – INRO's President of Board of Directors

INRO Supervisory Board

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Thank you for all the continuing support and please stay in touch!

INRO team