

TECHNOLOGY OFFER



MEDICAL UNIVERSITY
OF VIENNA

www.meduniwien.ac.at

Novel biomarkers for the prediction of neurological outcome after resuscitation

Four biomarkers of neurological recovery improve the early prediction of neurological outcome in patients who remain unconscious after out-of-hospital cardiac arrest and successful resuscitation. Outcome prediction currently is highly limited due to the lack of consistent predictors of clinically relevant brain damage, often resulting in postponement of critical decision about further treatment.

REFERENCE:
699.17

AVAILABLE FOR:
Licence

APPLICATIONS:
Assessment of neurological damage,
In-vitro diagnostic

DEVELOPMENT STATUS:
Identification

IPR:
PCT application filed Dec 2019

INVENTORS:
Christopher ADLBRECHT
Klaus DISTELMAIER
Raphael WURM

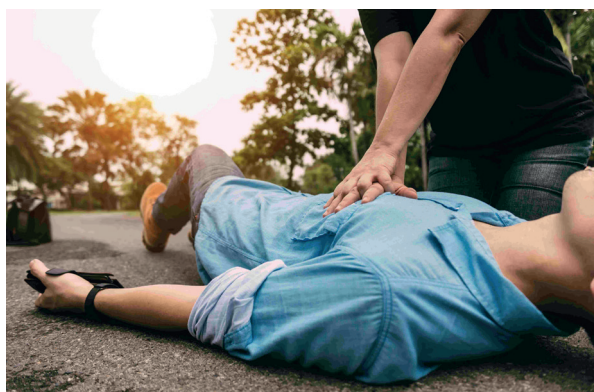
BACKGROUND

In Europe and the USA approximately 1.000.000 individuals experience out of hospital cardiac arrest (OHCA), of these roughly 250.000 / year arrive at a hospital alive.

Neurological consultation and multimodal prognostic assessment represents an integral part of post-resuscitation patient management and is of major clinical relevance for guidance of further treatment strategies. Currently, for early neurological prognostication in comatose OHCA patients, a multimodal strategy is recommended. However, despite this multifaceted diagnostic approach, early, reliable prognosis within the first days following resuscitation represents a challenge for clinicians.

TECHNOLOGY

Four highly reliable, objective plasma protein markers that improve prediction of neurological outcome in OHCA survivors were identified. These, combined with the currently recommended multimodal strategy including clinical examination, neurophysiological tests, cerebral imaging and established biomarkers, significantly improve the prediction of neurological outcome, allowing an earlier and better prognosis. As a consequence, often fateful decisions about the continuation, limitation, or termination life sustaining treatment can be based on more profound information, and timely decisions about treatment options in intensive care with far-reaching consequences on the future quality of life of the patient are facilitated.



CONTACT:

Helga Kroschewski
Medical University of Vienna
Technology Transfer Office
Spitalgasse 23, 1090 Vienna
T: +43-1-40160 25201
helga.kroschewski@meduniwien.ac.at

ADVANTAGES

- Early and robust assessment of neurological situation
- Clinical decisions in intensive care facilitated
- Proven clinical relevance
- Increasing patient numbers
- Potential application in other disease with neurologic damage/injury