# IARAS

IRRAS AB | NASDAO Stockholm: IRRAS

TRANSFORMING INTRACRANIAL BLEEDING TREATMENT

IRRAflow's patented dual lumen catheter and fluid management software provide both irrigation and aspiration to virtually eliminate catheter occlusions, thus reducing the infection risk.



IRRAS is a publicly-traded, commercial stage company focused on innovative solutions for brain surgery, with HQ in Stockholm and offices in Munich and San Diego. Its flagship intracranial drainage product, IRRAflow® launched in Europe in 2017. With FDA 510(k) clearance in July 2018, launch is expected in the US later this year.

## **OUR PRODUCTS & SERVICES**

There are 25.7m strokes per year, globally the leading cause of disability and the third leading cause of death. Chronic subdural hematomas, where bleeding occurs afterwards, are responsible for 1.5%–4% of all deaths in the EU and US. Combined, hemorrhagic strokes and chronic subdural hematomas represents an addressable market in the EU and US worth ~€1.2bn.

IRRAflow® addresses the complications associated with legacy methods of managing intracranial fluid, such as repeated catheter occlusion, inefficient fluid removal and high prevalence of infection. By using a dual lumen catheter that combines active irrigation with ongoing fluid drainage, during treatment, catheter occlusions prevent from forming, infection risk of is reduced and accurate ICP monitoring enables regulation of treatment based on desired pressure levels.

IRRAflow® is sold in Germany through the Company's own sales force and IRRAS is now recruiting sales people in US. The product is in registration phase in many other countries.

## WHAT MAKES US UNIQUE

IRRAflow® unique, patented design which simultaneously irrigates and aspirates virtually eliminates blockage and reduces infection rate so low that in 100 European use cases no post-operative related infection has been observed.

IRRAflow® technology addresses multiple unmet needs for brain pathologies, is protected by a strong IP estate and is CE marked and FDA 510(k) cleared for ICP monitoring and CSF drainage.

IRRAS is continuing on an innovative path, to develop and expand the application and indication areas for the device and add features to further broaden its clinical utility.

## WHY YOU SHOULD MEET US

IRRAS is looking to expand its international presence in the life science community and increase the awareness of neuroscientists and neurosurgeons, to the unique capabilities of the IRRAflow® device and potential for clinical benefit in use.

#### **KEY TEAM**

Anders P. Wiklund

- · Chairman
- 40+ years global experience in pharma & biotech leadership
- Former President & CEO, KabiVitrum, Inc. and KabiPharmacia, Inc.

Kleanthis G. Xanthopoulos, PhD

- · President & CEO
- Former CEO, Regulus Therapeutics;
  CEO, Anadys Pharma (acquired by Roche)
- Founded 4 co's (took 3 public on NASDAQ)
- Previously Associate
  Prof at KI, Stockholm

Fredrik Alpsten, MSc

- CFO and Deputy CEO
- · Former CFO, Boule Diagnostics, President & CEO, Clinical Diagnostic Solutions Inc., President & CEO, Doxa

