



#### COMPANY:

Biohope

### WEBSITE:

biohope.eu

#### **KEY PERSON:**

Ricardo Brage, VP of Business Development

#### **DESCRIPTION:**

Offers a patented in vitro diagnostic device to optimise immunosuppressive therapy for kidney transplant recipients and patients affected by autoimmune diseases

## TOP 10 IN VITRO DIAGNOSTIC SOLUTION PROVIDERS IN EUROPE - 2020

he global in-vitro diagnostics market is likely to increase at a high rate due to the increasing prevalence of chronic disease around the world. Rising fatal diseases such as CVD, CHD, Stroke, Cancer, and other heart diseases are driving the In-vitro diagnostics market. In recent years, there have been vigorous government contributions as well as company approaches that have supported the growth of the in-vitro diagnostics market. Many companies are putting in more effort to develop newer concepts and theories for diagnosing chronic ailments and other diseases using in-vitro diagnostics. Moreover, a growing emphasis on developing new tests for portable diagnostic devices is likely to supplement the growth of the in-vitro diagnostics market.

Recent developments made in in-vitro diagnostic solutions have been prolific for end-users as well as companies and manufacturers. Due to the portability factor, numerous geriatric prefers in-vitro diagnostics method over other methods. In addition to geriatrics, invitro diagnostics help in the treatment of those with severe chronic ailments and bowel disorders or muscle and joint injuries, wherein physical movements are limited. Backed by increasing demand, many companies are setting up in-vitro diagnostic centres with the aim of maximizing their profit.

The in-vitro diagnostics (IVD) laboratory stands at the centre of clinical decision-making because of its role in data generation. A recent study on the awareness of AI in the clinical laboratory showed that most laboratory professionals have already seen some advances driven by AI in their laboratory. As a result, they expect dramatic changes within the next two to five years in both the laboratory landscape and their routine workflow. To help healthcare organizations select the best IVD vendors, a distinguished panel comprising CEOs, CIOs, VCs, industry analysts, and MedTech Outlook's editorial board has narrowed down a list of IVDs solution providers who are on the forefront of innovative technologies and strategies.

We present to you the "Top 10 In Vitro Diagnostic Solution Providers in Europe - 2020."

# **Biohope** Transitioning Towards Precision Medicine

n the age of precision medicine, the kidney transplant arena has a different narrative. Even as breakthroughs in medicine have considerably improved the success rate of transplants to offer the best quality of life for patients with end-stage renal disease, the grim picture of high rates of graft rejection looms on the horizon. To counter graft rejection, patients are treated with immunosuppressive drugs on a long-term basis, which is generally associated with a host of adverse events. However, there is a catch. Every transplant recipient may need a different drug, and as many as 60 percent of them could be resistant to the current medication. Adding to



the complexity, the current method of immunosuppressant (IS) selection and dosing is done empirically and does not follow a personalised approach. This sub-optimal treatment practice may result in either under-immunosuppression that leads to graft rejections or overimmunosuppression that exposes the patient to a host of opportunistic infections while increasing the risk of cancer and tumor.

Madrid-based Biohope is addressing this critical unmet medical need. The company is all set to unveil a novel. patented in vitro diagnostic tool that optimises the immunosuppressive therapy and personalises treatment for kidney transplant recipients for improved clinical outcomes, and for patients affected by autoimmune diseases and conditions such as rheumatoid arthritis research is underway, and for lupus a deep technological assessment is planned. Biohope, with its lead product, IMMUNOBIOGRAM® (IMBG)-in vitro diagnostic test-enables the selection of the most optimal immunosuppressive therapy (a combination of drugs/dosage) for each patient at a specific point in time to optimise therapy.

IMBG combines a biotechnological kit and software for data interpretation and analysis to empower physicians with simple and useful reports. "IMBG offers a personalised comparative evaluation of the patients' sensitivity/resistance profile to a panel of the most commonly used IS in clinical practice, allowing physicians to predict and monitor the patients' response to a specific IS," explains Ricardo Brage, VP of business development, Biohope.

IMBG provides information that proves helpful for physicians to select the most appropriate immunosuppressive drugs for each patient and personalise the immunosuppressive therapy. For renal transplant recipients, an individualised immunosuppression regimen based on their response to IS can contribute notably to a decrease in graft rejection rates and severe adverse events such as metabolic disorders, opportunistic infections or malignancies. "More than 22 million patients worldwide can benefit from this unique technology," states Brage. It also benefits health systems significantly. The use of IMBG would entail a potential risk



reduction of graft failure, with savings of € 20,279 per high-risk transplanted patient in five years alongside an expected reduction in the adverse events rate that would generate savings of € 3,328 per non-high-risk patient in five years.

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Touted as the biggest innovation in transplantation in the last 15 years, IMBG has been clinically tested in patients after more than one year of kidney transplantation, as a major challenge for clinicians is to improve graft survival after one year and reduce the risk of rejection. Proving its effectiveness, a national study conducted in Spain with 70 kidney transplant recipients yielded positive results. Likewise, a two-year international trial of IMBG with 200 patients carried out at nine centres across five countries in Europe and the U.S proved to be successful.

The buoyant Biohope team, with a definite focus on research and development, is firing on all cylinders to come up with more innovative products that are beneficial to the medical fraternity, With IMMUNOBIOGRAM for kidney transplantation ready for commercialisation, the next step for Biohopeis to adapt and validate the technology for other indications like liver transplants, rheumatoid arthritis and lupus. The company's short-term plans on the anvil include forging strategic partnerships and expanding into Europe, North America and APAC in the next three vears. M