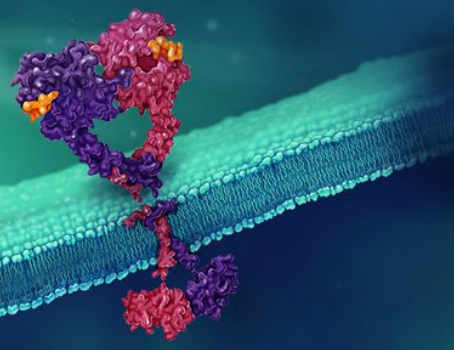
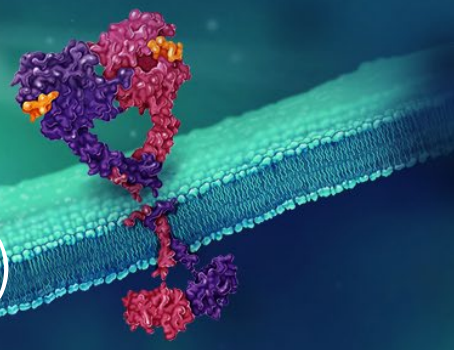


INTERNATIONAL MARKET ACCESS CONSULTING

Where expertise drives strategy

Supporting a global product launch: from valuable real-world evidence generation to successful reimbursement support



Scope of work and deliverables (1)

International Market Access Consulting (IMAC) was tasked with conducting a retrospective, observational cohort analysis to quantify healthcare resource utilization (HRU) in relation to metastatic bone disease (MBD) in prostate cancer patients who received prior treatment with hormonal therapy.

IMAC recruited Key Opinion Leaders (KOL)s to participate in the development of the research project plan, study hypotheses, and definition of the study variables.

PRE-STUDY ACTIVITIES

In consultation with the KOLs, IMAC developed the research project plan (RPP), defined the study hypotheses and the study variables, and coordinated the contracting and ethics approval from all study sites for the retrospective, chart review analysis.

Once the RPP was finalized, IMAC created the case report form (CRF) to clearly and efficiently capture all relevant information from the health records of study participants. The CRF was validated by site-specific clinicians and underwent a pilot phase before a final version of the CRF was produced.

IMAC designed a database in Microsoft Access® based on the final CRF. Automatic validation parameters were programmed into the data points to ensure the accuracy of the information collected and to facilitate the analysis.

IMAC prepared submissions to the Institutional Ethics Committees for all clinical sites.

PILOT STUDY - STUDY VALIDATION

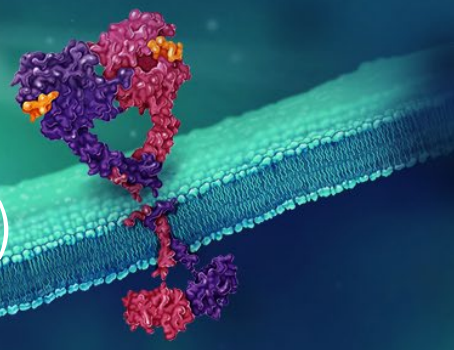
IMAC ran a pilot phase to assess the feasibility of the study and refinement of the CRF. This allowed a determination of the frequency of missing data from the charts and an evaluation of the time required to complete the data collection.

STUDY ACTIVITIES

Upon contract signature with the study sites, IMAC will coordinated a one-day meeting to train the staff who were in charge of extracting the data from the patient charts. There were several options for data capture including traditional pen and paper, electronic form (eCRF), and digital pen. Data validation was completed on 5% of the charts reviewed in the study.

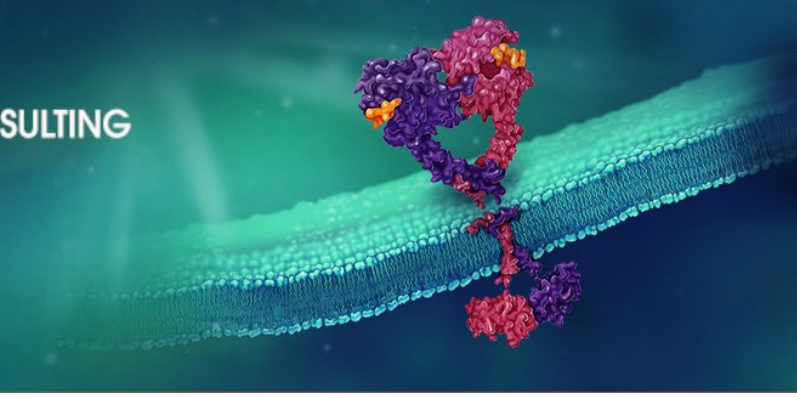
Data were analyzed using SAS and based on the predefined statistical analysis plan outlined in the RPP.

Scope of work and deliverables (2)



POST STUDY ACTIVITIES

IMAC developed a comprehensive final study report describing the methods and results of the study



IMAC has considerable experience developing economic models for products across a wide range of therapeutic areas, including nephrology. IMAC has supported strategic global submissions for products in Europe and North America including developing and adapting cost-effectiveness and budget impact models for the UK, Canada, and select European markets.

Additionally, IMAC has considerable experience developing health-technology submissions in the UK, Europe, South America, and North America. IMAC has successfully developed submissions to the National Institute for Health and Care Excellence (NICE) for products in many therapeutic areas. Recently, IMAC developed a successful Highly Specialised Technology (HST) submission for an innovative gene therapy for an ultra-rare disease and Single Technology Appraisal (STA) submissions for a first-line oncology product and a first-in-class monoclonal antibody.

"We've been running on repeat business for the last 12 years. We know how to really build a strong story that links both clinical & economic aspects of your therapy together"
– Louise Perrault, President & CEO

"IMAC consists of a team of people that are experienced in not only developing submissions, but also in rescuing submissions that are struggling for different reasons. We are able to quickly assess the challenge(s), strategize a plan for optimising the value proposition of a product and continue our support throughout the submission process. Because we are a team of experts, we are able to work quickly under tight deadlines that are often challenging for larger firms. We produce the highest quality products, on time and on budget, and we have an excellent success rate."
– Nicole Tunstall, Senior Consultant, HTA and Medical

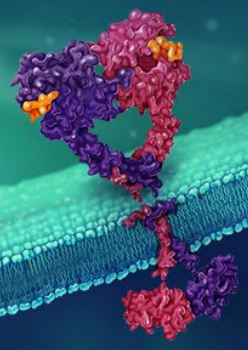
"We are people with experience, when we speak with our clients, we understand what you're talking about. We know how to develop products that stand up to review because of our expertise."
– Veronique Lauzon, Senior Health Economist

"IMAC is made up of more experienced qualified consultants who understand how to deal with the challenges many companies face when seeking market access for a new therapy. Because of this everything is completed on time, to a high level of quality, and a very good success rate."
– Eva Tsakonas, Senior Epidemiologist, Health Economist

"IMAC is above all a company of experts who are concerned about quality service throughout the duration of your project. We are a team of competent professionals who listen to and care about your needs and will successfully see your products through various evaluation processes while respecting the deadlines imposed."
– Ange Christelle Iliza, Research Assistant

"Working with IMAC is like adding a team of experts to your company for the duration of the project. From the project initiation to the final follow-up, you deal with the same experienced consultants who are there to advise and optimize the project whether it be an economic model, systematic literature review, HTA submission, global value dossier, manuscript, or conference presentation."
– Sarah-Gabrielle Béland, Senior Pharmacoepidemiologist

Background



Acute kidney injury (AKI) may result from critical illness or as a serious complication of major surgery, and impacts patient morbidity and mortality in the short- and long-term.[2,3,4] The treatment of AKI may require renal replacement therapy (RRT), an invasive procedure associated with high cost and extensive healthcare resource use.[4,5,6]

Intravenous (IV) fluids, used for resuscitation in the perioperative setting and in the management of critically ill patients, may play a role in reducing the risk of developing AKI.[8] IV crystalloids are recommended for resuscitation in critical illness, or during recovery from trauma and major operations.[9,10,11] Physiologically balanced IV crystalloids provide chloride in the physiologic range of human plasma and concentrations of anions that maintain electrical neutrality and act as buffers (eg, lactate, acetate, gluconate). As opposed to chloride-liberal IV fluid therapy, balanced IV crystalloid solutions avoid the increase in plasma chloride concentration and metabolic acidosis.[12] A meta-analysis of 6253 patients from 21 studies who received chloride-restrictive versus chloride-liberal IV fluids in perioperative or critical care settings reported that the use of chloride-liberal IV fluids was associated with a significantly higher risk of AKI (relative risk [RR] 1.64, 95% confidence interval [CI] 1.27, 2.13; P<0.001).[8]

Despite the substantial clinical evidence supporting the lowered risk of AKI with chloride-restrictive IV fluid therapy, there is a lack of analysis of the economic consequences of IV fluid choice. No studies have assessed the cost-effectiveness (CE) of chloride-restrictive vs chloride-liberal crystalloids by accounting for the most important difference in clinical impact, the variation in long-term renal function.

[2] Hobson C, Ozrazgat-Baslanti T, Kuxhausen A, et al: Cost and mortality associated with postoperative acute kidney injury. *Ann Surg* 2015;261(6):1207-1214.
[3] Bedford M, Stevens PE, Wheeler TW, et al: What is the real impact of acute kidney injury? *BMC Nephrol* 2014;15:95.
[4] Skinner DL, Hardcastle TC, Rodseth RN, et al: The incidence and outcomes of acute kidney injury amongst patients admitted to a level I trauma unit. *Injury* 2014;45(1):259-264.
[5] Srisawat N, Lawsin L, Uchino S, et al: Cost of acute renal replacement therapy in the intensive care unit: results from The Beginning and Ending Supportive Therapy for the Kidney (BEST Kidney) study. *Crit Care* 2010;14(2):R46.
[6] Vandijck DM, Oeyen S, Decruyenaere JM, et al: Acute kidney injury, length of stay, and costs in patients hospitalized in the intensive care unit. *Acta Clin Belg* 2007;62 Suppl 2:341-345.
[7] Zeng X, McMahon GM, Brunelli SM, et al: Incidence, outcomes, and comparisons across definitions of AKI in hospitalized individuals. *Clin J Am Soc Nephrol* 2014;9(1):12-20.
[8] Krajewski ML, Raghunathan K, Paluszkiewicz SM, et al: Meta-analysis of high- versus low-chloride content in perioperative and critical care fluid resuscitation. *Br J Surg* 2015;102(1):24-36.
[9] Raghunathan K, Murray PT, Beattie WS, et al: Choice of fluid in acute illness: what should be given? An international consensus. Br J Anaesth 2014;113(5):772-783.
[10] Brochard L, Abroug F, Brenner M, et al: An Official ATS/ERS/ESICM/SCCM/SRLF Statement: Prevention and Management of Acute Renal Failure in the ICU Patient: an international consensus conference in intensive care medicine. *Am J Respir Crit Care Med* 2010;181(10):1128-1155.
[11] Perner A, Junttila E, Haney M, et al: Scandinavian clinical practice guideline on choice of fluid in resuscitation of critically ill patients with acute circulatory failure. *Acta Anaesthesiol Scand* 2015;59(3):274-285.
[12] Russell L, McLean AS: The ideal fluid. *Curr Opin Crit Care* 2014;20(4):360-365.

Expertise and Achievements