bioMARkers and molecular tumor classification for non-genotoxic CARcinogeneis (MARCAR)

Research Areas

- Biomarker Research
  - Safety, Genomic Biomarker

At a Glance

- Status: Completed Consortium
- Year Launched: 2010
- Initiating Organization: Innovative Medicines Initiative
- Initiator Type: Government
- Location: Europe

Abstract

The bioMARkers and molecular tumor classification for non-genotoxic CARcinogeneis (MARCAR) consortium is managed by the Innovative Medicines Initiative (IMI) with an aim to research biomarkers that predict the development of cancer as an unintended and adverse response to a new drug. The use of these biomarkers that detect early carcinogenicity will hopefully accelerate drug development and increase patient safety.

Mission

MARCAR focuses on non-genotoxic carcinogenesis — specifically looking at the role of epigenetic effects that could be caused as unintended consequences of new drugs. Using a combination of molecular analysis technologies, MARCAR combines expertise in the field of biomarkers, human and rodent cancer models, imaging, molecular profiling, and bioinformatics. Participants will focus on liver tumors, the organ most affected by non-genotoxic carcinogenesis, during the preclinical safety evaluations of candidate medicines. Their findings aim to facilitate tumor identification in other organs as well, in hopes of providing insights in the mechanisms of tumor growth.
Consortium History

2012: MARCAR demonstrated that magnetic resonance imaging (MRI) can be used to reliably detect liver tumors in mice when they are just 1 mm across. The findings were published in the journal Toxicological Sciences.

Structure & Governance

Specific details of MARCAR’s governance structure were not publicly available. Most IMI-managed consortia are governed by a Steering Committee that reports to the European Federation of Pharmaceutical Industries and Associations (EFPIA) partners and IMI Executive Office. In addition to the Steering Committee, a Management Committee is often responsible for day-to-day monitoring of the consortium workstreams and reports to the Steering Committee. Additional committees, such as ethics or data-sharing committees, might be established as part of the consortium, if appropriate.

Financing

MARCAR receives total funding of €13.3 million. IMI contributes €6.1 million, EFPIA contributes €5.2 million in kind, and other sources contribute €2.1 million.

Intellectual Property

All IMI projects, such as MARCAR, operate under the same umbrella intellectual property (IP) policy. Any IP discovered as a result of work in the collaboration is owned by the participating institution that made the discovery (or if the discovery was made jointly, there is joint ownership). Other participants have access rights to the generated IP during and after the project for research use, and participant owners have the right to license their IP and associated obligations to other parties, including to affiliated entities. Third parties may request access rights, which do not involve the ability to sublicense without receiving authorization from the IP-owning participant.
Impact/Accomplishment

Updated publications and presentations resulting from this consortium can be found at http://www.imi-marcar.eu/publications.html

Links/Social Media Feed

<table>
<thead>
<tr>
<th>Other website</th>
<th><a href="http://www.imi.europa.eu/content/marcar">http://www.imi.europa.eu/content/marcar</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>Homepage</td>
<td><a href="http://www.imi-marcar.eu/project.html">http://www.imi-marcar.eu/project.html</a></td>
</tr>
</tbody>
</table>

Points of Contact

Jonathan Moggs
Project Coordinator
Novartis Institutes for BioMedical Research, Novartis Pharma AG

Joan Pitt
Press Inquiries
Novartis Institutes for BioMedical Research, Novartis Pharma AG
phone: +41 61 6962632
email: joan.pitt@novartis.com

Roland Wolf
Managing entity of IMI beneficiaries
Biomedical Research Centre, University of Dundee
phone: +44 (0) 1382 632621
email: c.r.wolf@dundee.ac.uk

Sponsors & Partners

Bayer Schering Pharma AG
Boehringer Ingelheim
CXR Biosciences Limited