Drug Repurposing Guidebook

Building Block I442

This document defines the content of the FACT SHEET to be created for each identified tool, incentives, initiative or practice (the Building Block) introduced by public bodies or used by developers to expedite drug repurposing in Rare Diseases (RDs).

<table>
<thead>
<tr>
<th>ITEM</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>Building Block (BB) Title</td>
<td>Competitive intelligence</td>
</tr>
</tbody>
</table>
| References | Open-source competitive intelligence software or online tools:  
1/ Governmental tools  
  • US tools:  
    [1] Pubmed  
    [2] NIH tool  
    https://www.nlm.nih.gov/services/databases_subject.html  
    [3] FDA tool  
    https://www.fda.gov/drugs/development-approval-process-drugs/drug-approvals-and-databases  
  
  • EU tools:  
    [5] European Galaxy Server: https://usegalaxy.eu , the open, reproducible, web-based platform for data intensive research  
  
2/ Commercial or OSINT software from non-governmental organisations:  
  [7] Babel X - AI-enabled data aggregation and analysis  
  [8] Maltego - Interactive datamining with rich visualization showing relationships between different data in the collection  
  
In IP, for freedom-to-operate studies:  
  [9] https://clarivate.com/  
| Description | "Competitive intelligence" software or tools consist in gathering and analysing information related to research discovery, biopharma, |
medtech, IP matters or real-world data intelligence in the life science field. On one side, governmental organisations developed “open-source intelligence (OSINT)” that can be used for free. On the other hand, non-governmental organisations or companies developed their own tools or software [6-8] with specific software and databases for IP matters and freedom-to-operate studies [9-11].

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<tr>
<td>Category</td>
<td>Compound and network databases and tools to use them</td>
</tr>
<tr>
<td>Type</td>
<td>Development practice</td>
</tr>
<tr>
<td>Geographical scope</td>
<td>International</td>
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<tr>
<td>Availability</td>
<td>Open source or access, and; Commercial software/tool restricted to the payers</td>
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| Scope of use             | • Basic Research investigations  
• Drug development  
• Clinical studies  
• Market studies                                                                 |
| Stakeholders involved    | Researchers, bioinformaticians, data scientists, From academia or industry  
Consultants in IP, innovation                                                                 |
| Enablers/ Requirements   | Basic researchers in chemistry, pharmacologists, bio-informaticians, data scientists  
Drug developers from academia or industry                                                                 |
| Output                   | New knowledge for faster drug development  
• Discovery of new targets for a RD  
• Discovery of new applications for a drug  
• Freedom-to-operate studies                                                                 |
<p>| Best time to apply and time window | At all stages of drug development.                                                                                                               |
| Expert tips              | PROs: Open-source competitive intelligence tools are accessible to all stakeholders                                                           |</p>
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<td>CONs: commercial software are usually very expensive for academia and can be used only by companies. The competitive intelligence software must be used by specific experts (data scientists, IP expert)</td>
</tr>
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