

# **STAMP Working Group on repurposing - Objective 2**

Lydie Meheus, Managing director

3 December 2018



### **Goals of objective 2**

- To provide 'real life' examples of product(s) / indications that could have been put through the pathway
- To consider how a **pilot** for testing the repurposing pathway might be introduced



### **Template for collecting information**

- Available product information: Active substance, authorised indication(s), authorised dosage form(s), authorisation details (MAHs, countries, etc.)
- New therapeutic use: Proposed indication, unmet medical need or significant public health benefit
- Potential incentives: Regulatory incentives (e.g. ODD, PUMA), IP (e.g. second and further medical uses), other incentives (e.g. H2020 and other grants, support from patient groups)
- Evidence: (Non-clinical data), clinical trial data and case reports, real world data (postauthorisation studies, registry data), information from clinical treatment guidelines



### **Case 1: Example of late entry into the pathway**

#### **Docetaxel in hormone sensitive metastatic prostate cancer**

- Data available from three Phase III trials (STAMPEDE, CHAARTED and GETUG-AFU 15 trial)
- Two phase III trials are still ongoing (PEACE-1 and ARASENS trial)
- Studies with real-world evidence
- Off-label use is common (ESMO Clinical Practice Guidelines, European Association of Urology prostate cancer guidelines, NCCN Prostate Cancer Guidelines)

→ Need for **guidance** on how to deal with (contradictory) results from clinical trials and RWE-studies.



### Case 2: Example of early entry into the pathway

#### CUSP9v3 protocol in recurrent glioblastoma

- Phase 1 trial nearly completed with positive results (combination appears to be safe).
- Liaising with all involved MAHs would be very complicated for the champion.
- Unclear what regulatory pathway should be followed to bring this combination on-label.
   Medicines would be administered in same dosage form as specified in original MA.
- → Need for early scientific advice on regulatory and scientific challenges.



### Learnings from the case studies

- A single entry point into the pathway lowers the threshold for champions to send in a proposal.
- Gathering data on the authorisation details of an active substance might be quite challenging for a champion. The Article 57 database published by the EMA on their website provides an up-to-date overview of all MAHs for an active substance authorised in Europe. The link to the Article 57 database could be included in the template/check list for the champion.
- Preparing a data package for a scientific advice meeting is challenging for a champion with limited knowledge of the regulatory process. Guidance documents and a template/topic checklist would be useful.



#### Learnings from the case studies

- The pathway should allow combinations of repurposed drugs (e.g. CUSP9v3 combination of nine repurposed drugs with temozolomide).
- The case of docetaxel showed that data from multiple phase 3 trials and real-world evidence studies might be available. Therefore, champions should provide an exhaustive list of all available data, even if these data seem to be contradictory. This is an unexpected complexity since a MA for a new medicine is based on a single registration trial.
- A lot of time and effort would be required from the champion. Their efforts should be rewarded by removing certain disincentives, like the cost of SA.



### **Suggestion for pilot cases**

#### Late-stage development:

- Adjuvant bisphosphonates for the prevention of breast cancer spreading to the bone in post-menopausal women with primary breast cancer
- A lot of evidence to support off-label use, off-label use is common

#### Early-stage development:

- Propranolol in cutaneous angiosarcoma
- ACF has an ODD in this indication and is preparing a dossier to apply for protocol assistance by EMA



#### ecancermedicalscience

#### ReDO\_DB: the repurposing drugs in oncology database

Pan Pantziarka<sup>1,2</sup>, Ciska Verbaanderd<sup>1,3</sup>, Vidula Sukhatme<sup>4</sup>, Rica Capistrano I<sup>1</sup>, Sergio Crispino<sup>1</sup>, Bishal Gyawali<sup>1,5</sup>, Ilse Rooman<sup>1,6</sup>, An MT Van Nuffel<sup>1</sup>, Lydie Meheus<sup>1</sup>, Vikas P Sukhatme<sup>4,7</sup> and Gauthier Bouche<sup>1</sup>

<sup>1</sup>The Anticancer Fund, Brussels, 1853 Strombeek-Bever, Belgium
<sup>2</sup>The George Pantziarka TP53 Trust, London, UK
<sup>3</sup>Clinical Pharmacology and Pharmacotherapy, Department of Pharmaceutical and Pharmacological Sciences, KU Leuven, Leuven, Belgium
<sup>4</sup>GlobalCures Inc., Newton, MA 02459 USA
<sup>5</sup>Department of Medicine, Brigham and Women's Hospital, Harvard Medical School, Boston, MA 02115 USA
<sup>6</sup>Oncology Research Centre, Vrije Universiteit Brussel, Brussels, Belgium
<sup>7</sup>Emory University School of Medicine, Atlanta, GA 30322 USA

Correspondence to: Pan Pantziarka. Email: anticancer.org.uk@gmail.com

#### Abstract

Repurposing is a drug development strategy that seeks to use existing medications for new indications. In oncology, there is an increased level of activity looking at the use of non-cancer drugs as possible cancer treatments. The Repurposing Drugs in Oncology (ReDO) project has used a literature-based approach to identify licensed non-cancer drugs with published evidence of anticancer activity. Data from 268 drugs have been included in a database (ReDO\_DB) developed by the ReDO project. Summary results are outlined and an assessment of clinical trial activity also described. The database has been made available as an online open-access resource (<u>http://www.redo-project.org/db/</u>).

## **Questions?**

