## Latest news about drug repurposing in oncology #1

19 October 2020



Discover our first newsletter with scientific updates: we have listed recent findings about the repurposing of generic drugs in oncology. Our intention is to help bring these findings to the attention of the broader cancer research community.

Drug repurposing is a strategy for identifying new uses for approved drugs, outside the scope of the original indication. It is one of the focus areas of the Anticancer Fund.

Being listed is no endorsement of the results and conclusions of the article. All articles need to be critically assessed and viewed in their broader research context.

Please get in touch if you're interested in discussing research based on the findings presented below (<u>info@anticancerfund.org</u>).

### **Clinical data**

<u>Influence of Klebsiella pneumoniae and quinolone treatment on prognosis in patients with pancreatic cancer</u>

Pancreatic cancer; observational study; fluoroquinolone; antibiotics; microbiome.

<u>Evaluating prophylactic heparin in ambulatory patients with solid tumours: a systematic review and individual participant data meta-analysis</u>
Heparin; thromboprophylaxis; overall survival; meta-analysis.

Association of post-diagnostic use of cholera vaccine with survival outcome in

## breast cancer patients

Breast cancer; observational study; cholera vaccine; immunotherapy.

#### **Preclinical data**

Repurposing a psychoactive drug for children with cancer: p27 Kip1-dependent inhibition of metastatic neuroblastomas by Prozac

Fluoxetine; neuroblastoma; MYCN

Acute statin treatment improves antibody accumulation in EGFR- and PSMAexpressing tumors

Statins; Endocytosis; monoclonal antibodies; EGFR; PSMA.

Repurposing the FDA-Approved Antiviral Drug Ribavirin as Targeted Therapy for Nasopharyngeal Carcinoma

Nasopharyngeal Carcinoma; Ribavirin; EZH2; Radiotherapy.

Enhanced Anticancer Effect of a Combination of S-adenosylmethionine (SAM) and Immune Checkpoint Inhibitor (ICPi) in a Syngeneic Mouse Model of Advanced Melanoma

Melanoma; immunotherapy; SAMe; checkpoint inhibition.

Synergistic antitumor interaction of valproic acid and simvastatin sensitizes prostate cancer to docetaxel by targeting CSCs compartment via YAP inhibition Prostate cancer; statins; valproate; cancer stem cells.

Other drug repurposing news (soft repurposing, non-oncology late-phase trials, regulations ...)

Sorafenib maintenance in patients with FLT3-ITD acute myeloid leukaemia undergoing allogeneic haematopoietic stem-cell transplantation: an open-label, multicentre, randomised phase 3 trial

Acute myeloid leukemia; Sorafenib; Stem-cell transplantation; randomized controlled trial; soft repurposing; Global oncology.

Olanzapine for Prevention of Vomiting in Children and Adolescents Receiving Highly Emetogenic Chemotherapy: Investigator-Initiated, Randomized, Open-Label Trial

Chemotherapy-induced nausea and vomiting; Paediatric oncology; Randomized controlled trial; Global oncology.

## <u>Colchicine in Patients with Chronic Coronary Disease</u>

Coronary disease; colchicine; Randomized controlled trial.

# Popular media

Cancer World: Could covid-19 boost interest in drug repurposing in oncology?