

## Latest news about drug repurposing in oncology #2

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[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.

Below, 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.

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 context.

Please get in touch if you're interested in discussing research based on the findings presented below ([info@anticancerfund.org](mailto:info@anticancerfund.org)).

### **Clinical data**

[Phase I clinical trial of combination propranolol and pembrolizumab in locally advanced and metastatic melanoma: Safety, Tolerability, and Preliminary Evidence of Antitumor Activity](#)

Published in Clin Cancer Res

Phase 1 trial; safety; propranolol; pembrolizumab; immuno-oncology.

[A Phase II Study of the Efficacy and Safety of Chloroquine in Combination With Taxanes in the Treatment of Patients With Advanced or Metastatic Anthracycline-refractory Breast Cancer](#)

Published in Clin Breast Cancer

Phase 2 trial; single-arm; chloroquine; metastatic breast cancer; cancer stem cells.

[Reduction of Liver Metastasis Stiffness Improves Response to Bevacizumab in Metastatic Colorectal Cancer](#)

Published in Cancer Cell

Observational study; metastatic colorectal cancer; renin-angiotensin system; angiotensin-receptor blockers; tumour stiffness; metastasis-associated fibroblasts.

[Perioperative Dexamethasone Is Associated With Higher Short-Term Mortality in Reconstructive Head and Neck Cancer Surgery](#)

Published in J Oral Maxillofac Surg

Randomised controlled trial; head and neck cancer; dexamethasone; detrimental effect; peri-operative therapy.

[CXCR4 inhibition in human pancreatic and colorectal cancers induces an integrated immune response](#)

Published in PNAS

Phase 1 trial; safety; plerixafor; CXCR4; immune-oncology.

**Preclinical data**

[Drug repositioning of antiretroviral ritonavir for combinatorial therapy in glioblastoma](#)

Published in Eur J Cancer

Glioblastoma; Ritonavir; ER-stress; autophagy; temozolomide; radiotherapy.

[Repurposing loperamide to overcome gefitinib resistance by triggering apoptosis independent of autophagy induction in KRAS mutant NSCLC cells](#)

Published in Cancer Treat Res Commun

NSCLC; loperamide; KRAS mutation; gefitinib.

[Inhibition of G protein-coupled receptor kinase 2 promotes unbiased downregulation of IGF-1 receptor and restrains malignant cell growth](#)

Published in Cancer Res

Ewing's sarcoma; IGF1 receptor; paroxetine; drug discovery; biased signalling.

[Mebendazole for Differentiation Therapy of Acute Myeloid Leukemia Identified by a Lineage Maturation Index](#)

Published in Leukemia

Acute myeloid leukaemia; mebendazole; differentiation; lineage maturation index.

[Potential and mechanism of mebendazole for treatment and maintenance of ovarian cancer](#)

Published in Gynecol Oncol

Ovarian cancer; mebendazole; p53; maintenance.

[Repurposing of antipsychotic trifluoperazine for treating brain metastasis, lung metastasis and bone metastasis of melanoma by disrupting autophagy flux](#)

Published in Pharmacol Res

Brain metastasis; trifluoperazine; blood brain barrier; melanoma; lysosome.

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

[Positive opinion for fenfluramine in the treatment of seizures associated with Dravet Syndrome](#)

New market authorization; fenfluramine; commercial repurposing; rare disease; epilepsy.

[Systematic approach to selecting licensed drugs for repurposing in the treatment of progressive multiple sclerosis](#)

Multiple sclerosis; drug repurposing prioritisation.

[Importance of dose redefining in the process of drug repurposing](#)

Pharmacology; drug repurposing.