

## **Research highlights**

- Palbociclib inhibits neuroblastoma cell proliferation and drives differentiation
- The transcriptome and epigenome are reprogrammed favouring neuronal differentiation
- Palbociclib inhibits tumour growth in *in vivo* mouse neuroblastoma models
- PB and RA together drive transcriptional changes associated with improved prognosis

## **eTOC blurb**

Ferguson and Gillen et al. show the CDK4/6 inhibitor, palbociclib, reactivates a latent ability of neuroblastoma cells to undergo differentiation, and improves survival in mouse neuroblastoma models. Moreover, combined treatment of cells with retinoic acid further enhances differentiation, suggesting adding palbociclib may improve outcomes to the current treatment for neuroblastoma.