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An opportunity not to be missed! Clinical trial re-investment to build better research for better impact

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Clinical trials play a pivotal role in improving patient outcomes and are a crucial factor in the National Institute of Clinical Excellence's (NICE) assessment of novel therapies.[1] In 2016–17, 670,000 people were recruited into over 4,700 trials across the NHS,[2] thanks to more than £200 million of annual investment in the National Institute for Health Research's (NIHR) Clinical Research Network.[3] UK cancer trials are developed by the National Cancer Research Institute (NCRI) and delivered by the NIHR. This internationally significant portfolio includes large phase III randomized controlled trials where study drugs are often provided free of charge by pharmaceutical companies.[4] In addition to improving clinical outcomes, accelerated trial delivery drives economic growth and represents a core feature of the UK life sciences proposition, as articulated in HM Government's Life Sciences Industrial Strategy.[7]

Blood cancer is a significant area of therapeutic advance. Thousands of UK patients enrolled on clinical trials benefit from effective new therapies – often before NHS England commissions them. In order to quantify this often-unrecognised benefit to the UK health economy, we calculated the direct drug savings from three of the largest clinical trials in common blood cancers: chronic myeloid leukaemia (SPIRIT-2), chronic lymphocytic leukaemia (FLAIR), and multiple myeloma (Myeloma XII) (supplemental figure). Together, these trials provided access to >£200 million in free drug to 1,737 patients. In addition to these trials' pivotal importance in improving treatment strategies, they also generated substantial cost savings. These economies are further amplified since, in addition to receiving free drug, the costs of standard treatment were not incurred either. Consequently, the order of magnitude of the savings across the entire NCRI trial portfolio is even higher than that outlined.

These savings have been replicated in early-phase clinical trials in blood cancer delivered by the Trials Acceleration Programme (TAP), flagged as a beacon of best practice in the Life Sciences Industrial Strategy. TAP has produced >£100 million of savings to the UK health economy whilst also benefiting patients and fostering the pharma–NHS relationship. Such initiatives are a magnet for inward investment in UK PLC. The NHS's unparalleled ability to facilitate the transfer from early- to late-stage clinical trials within a single healthcare system should be embraced in order to rapidly improve patient outcomes and strengthen the health economy. All UK patients should be offered the opportunity to enter well-designed, cutting-edge clinical trials where feasible.

Patient outcomes are currently being transformed by an unprecedented wave of novel therapies. The UK's strength in accelerated trial delivery is undermined by a number of bottlenecks, including funding limitations for clinical trial networks and delays in trial set-up. To continue to attract inward investment and enable rapid assessment of novel therapies, some of the substantial savings described here should be invested in NIHR trial networks. This is urgently required if we are to deliver a clinical trials infrastructure that is fit for purpose in 2019, ensure that more patients benefit from therapeutic breakthroughs, and unlock the UK life sciences sector's considerable economic potential.

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