ACCELERATED ACCESS COLLABORATIVE

GRAIL - NHS ENGLAND PARTNERSHIP

Executive summary

Diagnosis of cancer at an early stage is one of the ambitions set out in the NHS Long-Term Plan. Grail has developed a blood-based test, Galleri®, that in studies has been shown to identify multiple cancer types at an early stage from a single blood sample and could support the NHS to achieve its Long-Term Plan ambition of increasing the proportion of cancers diagnosed at stages 1 and 2 from around 55% currently to three-quarters by 2028.

The paper provides information for the Board regarding the partnership between NHSE and Grail, which includes a demonstration project of Galleri in England to address uncertainties and subsequent potential purchase of Galleri by the NHS, assuming results are in line with expectations.

Background

- 1. Diagnosis of cancer at an early stage is one of the ambitions set out in the NHS Long-Term Plan.
- 2. Grail has developed a test, Galleri®, that in studies has been shown to identify more than 50 cancer types at an early stage from a single blood test and could support the NHS to achieve its Long-Term Plan ambition of increasing the proportion of cancers diagnosed at stages 1 and 2 from around 55% currently to three-quarters by 2028.
- 3. If successful this would lead to greater probability of curative treatment, and therefore reduced mortality as well as lower cost of treatment.
- 4. As it a simple annual or biennial blood test, which could be carried out anywhere in the community, Galleri could improve referral rates and improve patient experience, as well as addressing social, economic and racial inequalities in access to cancer diagnosis and care.
- 5. In order to address uncertainties and to support the NHS to deliver its Long-Term Plan ambitions in the suggested timescale, instead of undertaking a mortality-driven clinical trial in the UK which may take 15-20 years to report, Grail is undertaking a 2-part, real world demonstration project in England which Grail is funding. The studies were designed in collaboration with a panel of primary and secondary care experts across the UK oncology field, led by Professor Peter Johnson, National Clinical Director for Cancer at NHS England and NHS Improvement. The study protocol was also reviewed at a steering group made up

of key individuals from organisations across the health system including Dame Sue Hill, Dame Cally Palmer and David Fitzgerald. The studies also received full REC, HRA and CAG approval where appropriate. MHRA has also been fully informed, although as the test is CE-Marked, the studies did not need MHRA approval.

6. The two parts to the demonstration project are:

Part A will enrol up to 140k **asymptomatic** participants aged 50-77 in a pragmatic randomised study (RCT):

- 1. Participants will undergo three annual rounds of screening, with positive Galleri tests followed up through existing NHS services;
- 2. The study commenced on 31 August 2021 and initial results are anticipated to be available late 2023.
- Assuming these timelines are achieved, and results are in line with expectations, NHS has committed to interim access of the test to 1m patients in 2024 and 2025 at a pre-agreed price;
- 4. Final results should be available late 2025.
- 5. Assuming results are in line with expectations, this will trigger a full commercial negotiation to support routine access as part of a population screening program from early 2026.

Part B will enrol up to 25k **symptomatic** patients whom GPs are intending to refer through an urgent or routine referral to a diagnostic clinic, to see if Galleri could support faster diagnosis in these patients. An initial observational phase of 6000 patients, commenced on July 7, 2021 and will be followed by an interventional phase in late 2022, assuming results from the observational phase clarify the intended use opportunity. Participants will undergo a single Grail test and be followed up through NHS data. Results and modelling of potential impact should be available mid 2023 which, if achieved, will trigger interim access from late 2023/early 2024.

- 7. Grail and NHSE have agreed an in-principle pricing arrangement, dependent on volumes, wherein the NHS receives globally preferential pricing *and* a commitment to price at a level that meets an acceptable cost-effectiveness threshold. If the results do not meet the pre-agreed success criteria, there is no commitment for the NHS to purchase, i.e. the NHS will only pay if Galleri is proven to be effective.
- 8. In the medium-term, there may also be wider NHS and UK benefits, including:
 - Grail building a new state-of-the-art test processing and sequencing facility in the UK once the NHS commits to purchasing minimum annual volumes, keeping the UK at the global forefront of clinical application of genomics, and
 - 2. the opportunity for UK plc to secure additional FDI and increase share of global clinical trials by enabling and facilitating a desired paradigm shift in pharma industry oncology trials to patients with earlier disease.

Considerations and Critical Role of AAC

- 1. Grail is making a very substantial investment in carrying out the demonstration project in the UK. The alternative would have been to conduct the RCT in the USA, where Grail is based. With pivotal help from NHSE senior leadership, influential individuals/KOLs and the AAC, we were able to persuade Grail leadership that the NHS is the best system globally in which to conduct such studies, given the single payor system, ability to collect longitudinal data etc.
- 2. Critical to the decision was the commitment to rapid roll-out and purchasing assuming positive study results, but with recognition that there can be negligible risk to the NHS if results do not meet expectations. The ability to structure such a deal was essential.
- 3. The AAC was extremely helpful in project managing and drawing together the multiple parties to enable the negotiations to proceed at pace and to completion. AAC also took the lead in developing a high-level initial implementation plan to support the uptake of up to 1m tests during the interim access period in 2024 and 2025.
- 4. Having completed the negotiations with the NHSE Commercial team in December 2020, Grail, working in partnership with NHS colleagues and other partners, has been able to move quickly to commence the two studies:
 - a. The symptomatic study ("Symplify") commenced within 7 months of deal completion;
 - b. The RCT ("NHS-Galleri") commenced within 8 months of deal completion;
 - c. Grail submitted for REC/HRA approval for the RCT in late March; approval was received on 2 July, with a further amendment approved on 27 July; the first person enrolled on to the study on 31 August, within 35 days of that approval;
 - d. NHSE and Grail jointly undertook a public launch of the trial on 13 September.
- 5. Both studies are progressing well. As at mid-October:
 - The symptomatic study has enrolled more than 4,000 participants across England and Wales. We expect to reach the 6,000 target by mid-November;
 - b. The RCT has enrolled more than 4,500 participants. Participants are being enrolled in specially-commissioned mobile units to ease access and to minimise the burden on NHS services. As at mid-October, three of seven units are operating, in line with plan. By mid-November, this will expand to 7 units, operating across 8 of the 21 England Cancer Alliances. At that point, the target is to enrol approximately 4,000 participants per week, with a target end to enrolment in summer 2022. If this is achieved, this will be one of the fastest rates of recruitment of any large study in the world.
 - c. Encouragingly, so far, the RCT has achieved a good gender, socioeconomic and ethnic distribution.

6. During the meeting, I will give an update and also describe some of the "firsts", as well as some of the challenges we have encountered so far.

Author

Sir Harpal Kumar, President, Grail Europe 18 October 2021