Manchester City Council Report for Resolution

Report to: The Executive – 11 July 2018

Subject: Biomedical Investment - the translation and industrialisation of

diagnostic biomarkers in Manchester

Report of: The Chief Executive, the City Treasurer and the City Solicitor

Summary

This report sets out the requirement to support research in life science sub-sectors of Health and Medical Technologies - encompassing precision medicine, digital health, and diagnostics, providing a strong platform for the development of an innovation cluster within the region's (and wider North's) growing knowledge economy. It supports key growth sectors within one of Manchester's and Greater Manchester's priority economic assets, located in the regional core of the economy. It fully aligns with, and supports, the ambitions and business plans of a wide range of local partners, and will significantly accelerate the pace of economic activity within this priority area for investment, for the benefit of the Manchester and Greater Manchester economy as a whole.

The proposal discussed within the report will also deliver to Manchester and GM improved access by residents and patients to novel clinical trials, and the ability to benefit from new diagnostic testing, to drive significant improvements to overall health and well-being.

The proposal is aligned with the national Industrial Strategy and the recent Life Science Strategy and Sector Deal.

Recommendations

The Executive is recommended to:

- 1. note the planned support in precision medicine and diagnostics research, which is part of a key growth sector in the Manchester economy.
- 2. note the intended partnership arrangements with Health Innovation Manchester and other partners, to enable Manchester residents to benefit from the innovations in diagnostics and personalised medicine.
- 3. approve the entering into of a contractual and commercial arrangement to give effect to the detailed transactions set out in the second confidential report attached at Part B of this agenda subject to full Council approval of the proposals.
- 4. delegate authority to the Chief Executive, City Treasurer and the City Solicitor in consultation with the Leader, the Executive Member for Finance and Human

Resources, to negotiate and finalise the terms of the commercial arrangements.

- 5. delegate authority to the City Solicitor, and City Treasurer to enter into and complete all documents or agreements necessary to give effect to the recommendations in this report.
- 6. In accordance with paragraph 18 of Part 4, Access to Information Procedure Rules and paragraph 14 of Part 4, Scrutiny Procedure Rules of the Council's constitution, and having consulted with and/or obtained the agreement of the relevant statutory officers and elected members, Executive is asked to approve this matter as urgent, in that any delay caused by the key decision and call-in processes, would seriously prejudice the legal or financial position of the Council or the interests of the residents of Manchester and exempt the above decisions from call in.

Wards Affected: Hulme, Ardwick

Manchester Strategy outcomes	Summary of the contribution to the strategy
A thriving and sustainable city: supporting a diverse and distinctive economy that creates jobs and opportunities	The Council's support will accelerate economic growth in the region by enabling the translation and industrialisation of diagnostic biomarkers, through a programme of industrial R&D. The investment will play an integral part in helping Manchester and the North of England enhance and diversify its excellence in the health and life science research and activity, and attract clusters of related industry activities. The Council will be working with partners on the Corridor Manchester Life Sciences Enterprise Zone to develop the ecosystem necessary to support and incentivise SME colocation in these activities, and maximising training and educational opportunities in this sector.
A highly skilled city: world class and home grown talent sustaining the city's economic success	Investment in the proposed programme of industrial R&D will be undertaken through partnerships with the city's higher education institutions, in particular through the sharing of relevant IP, participation in university training programmes to source new talent, and will further support the city's drive for high calibre graduate talent retention through job creation. It will act as a UK leader in health science and biomedical development to improve access for Greater Manchester people into health science jobs.

A progressive and equitable city: making a positive contribution by unlocking the potential of our communities	The proposal will also improve health outcomes for Manchester and GM residents. The development of these health innovation activities have the ability to transform the future of early detection, diagnosis, and management of illness, making possible major strides in the prediction and prevention of disease, and the personalisation of treatments (i.e. personalised medicine). Not only will these advances improve patient outcomes but will also help reduce the burgeoning demand on health care services.
A liveable and low carbon city: a destination of choice to live, visit, work	The benefits of health investment are much broader than the direct impact on individual residents. They will improve health and wellbeing outcomes for all, support the growth and creation of high value jobs, contribute to growing an international class Applied Health Innovation Campus, help improve graduate retention, and attract new and emerging business – all contributing to making the City an attractive place to live and work.
A connected city: world class infrastructure and connectivity to drive growth	The business proposition will be located within the Corridor Manchester Life Sciences EZ, thus benefitting from strong public transport links. The development will be well served by new pedestrian and cycle routes.

Full details are in the body of the report, along with any implications for:

- Equal Opportunities Policy
- Risk Management
- Legal Considerations

Financial Consequences

The detailed financial consequences arising out of this report are set out in the second confidential report elsewhere on this agenda. It is proposed that Corridor Manchester Life Sciences Enterprise Zone business rates income of up to £23.4m will support this project.

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Background documents (available for public inspection):

None

1. Background

- 1.1 The North of England plays a key role in the development of the UK's Life Sciences sector, with 1,000 businesses contributing more than £10.8 billion to the UK economy each year^{1.} Approximately 97 per cent of these organisations are small and medium-sized enterprises (SMEs), providing a strong supply chain for new investors to the region. The North of England's Life Sciences sector employs 570,000 people and is forecasted to grow by 44.6 per cent by 2030. It exports over £8.1 billion of medicinal and pharmaceutical products each year and is an important growth sector for the Northern economy in terms of GVA growth².
- 1.2 Alongside these national and pan-regional impacts, Manchester and Greater Manchester have a strong asset base in health and science research upon which the City-region can build to maximise its growth. However, Manchester's single greatest strength in this capacity is the culture of collaboration which brings agencies and disciplines together in pursuit of shared objectives and goals. The City has a long track record of successful partnerships in most economic spheres, and has for some years had a shared focus on science and technology as key growth sectors for the regional economy.
- 1.3 The future success of the City will depend upon building and strengthening our globally distinctive sectors such as life sciences, which can provide new platforms for global trade and investment, skills development, and industrial collaboration. These specialisms will further drive new opportunities for attracting and growing high value businesses and jobs, collaboration and diversification of business that will contribute to the city's growth trajectory.
- 1.4 Being at the forefront of innovation in precision medicine, digital health, and diagnostics not only gives the city and its partners unique opportunities for driving this economic growth, but also in pioneering new approaches to tackling some of the challenges around population health opportunities based upon the growing asset base, and the capacity through new devolution arrangements to promote new approaches to health care, early help and intervention.
- 1.5 The ecosystem around precision medicine is primarily centred on two main innovation hubs. The first is the Corridor Manchester Campus, a dense cluster of clinical, academic, and industrial assets including the University of Manchester (UoM) and Manchester Metropolitan University (MMU). The University of Manchester's Faculty of Biology, Medicine, and Health houses several research institutes, including SuperSTEM, and the Henry Moseley X-Ray Imaging Facility. The Manchester University NHS Foundation Trust, the largest grouping of university research hospitals in the UK treating over three million patients annually, is a key part of the Corridor. A major NIHR Biomedical Research Facility, and integrated University research centres and

¹ UKTI, Northern Powerhouse: Opportunities in Life Science, 2015

² ibid

- institutes (including the Stoller Biomarker Discovery Centre and MRC Pathology Node (MMPathIC)) are further key presences.
- 1.6 Further south is The Christie Hospital, the largest single-site cancer treatment and research centre in Europe. The Christie 'cluster' includes the Cancer Research UK Manchester Institute (The Paterson Institute), the Manchester Cancer Research Centre, and the Proton Beam Therapy Centre.
- 1.7 The second major cluster is at Alderley Park, which is one of the best-invested bioscience sites in the UK. It offers 0.75 million ft² of full-spectrum bioscience facilities; a major cluster of Life Science SMEs; and flagship national facilities, including the Medicines Discovery Catapult, The Anti-Microbial Resistance (AMR) Centre, and an important in-vivo facility. Formerly the home of AstraZeneca, Alderley Park has excellent facilities and is now making major strides in re-purposing itself following AZ's decision to divest there. The Medicines Discovery Catapult is likely to be an important collaborator for this initiative, given that it too is focused on progressing activities in the same field.
- 1.8 Together with the University of Manchester's research excellence, Manchester Science Partnerships (the largest and most commercially successful science park owner in the UK) is an important operational tie that binds the Corridor and Alderley clusters together as an operating whole. MSP is a public-private partnership whose objective is to support the growth of innovation-driven science and technology businesses. It achieves this by providing specialist workplace and laboratory environments and support services for science and technology businesses, working with partners and stakeholders to secure inward investment and the further development of the region's strategic assets. Currently, the Partnership has over 1.5m ft² of workspace, incubation, and lab facilities at its two city centre Manchester campuses, and at Alderley, catering for innovation businesses at all stages of development.
- 1.9 These spatial concentrations are important in facilitating the collaboration which is the hallmark of Manchester's approach. But the value of that collaboration was strengthened when all NHS expenditure was consolidated within a single partnership, bringing together 37 separate NHS institutions. Greater Manchester immediately broadened the scope of this opportunity by agreeing that this partnership should also embrace the local authority bodies responsible for the population's Health and Care, thus creating an entity with a shared vision to improve the health of a population of 2.8 million people, and to transform the care and treatment of those in ill-health through crossinstitutional working and shared knowledge.
- 1.10 The partnership formed to take devolution forward, The Greater Manchester Health and Social Care Partnership (GMHSCP), recognised that transformational change required a more direct and dedicated focus on aligning Health and Care priorities with the city's academic and research assets, and the skills and resources of industry (including leading innovators and an already flourishing SME sector). As a consequence, it set up a body dedicated to this purpose Health Innovation Manchester (HInM). HInM is an academic health science system comprising the region's four universities,

NHS and social care bodies, research institutions, the Manchester Academic Health Science Centre (MAHSC), the Academic Health Science Network (AHSN), and industry.

- 1.11 In this context, and on behalf of Manchester partners, HlnM has been the lead organisation in developing the thinking around the case for increased diagnostic biomarker capability and capacity in Manchester.
- 1.12 Key assets within this partnership include:
 - University of Manchester one of the UK's strongest research universities in areas that include Cancer, Industrial Biotechnology, Advanced Materials, Energy, and Global Inequalities (including Health). UoM is home to several Healthcare-aimed institutions focused on furthering Precision Medicine, and accelerating its delivery to the patients in Greater Manchester and the UK. The University includes, for example, one of two Cancer Research UK's major UK centres.
 - Manchester Foundation Trust . MFT is one of the fundamental parts of the vision for creating a healthier Manchester, defined in the Manchester Locality Plan³. MFT has a rich history of innovation in genomic medicine, spanning the entire translational spectrum from basic science discovery to clinically-directed prototyping of diagnostics and therapeutics.
 - The Manchester Precision Medicine Institute (MPMI) provides an environment for academics, clinical researchers, healthcare and industry professionals, patients, and their families and carers to work together to implement precision medicine in Manchester and the UK.
 - The Manchester Centre for Genomic Medicine (MCGM) is a partnership that unifies NHS genomics services and The University of Manchester's research and teaching, creating one of the leading centres for clinical genomics in Europe.
 - The Stoller Biomarker Discovery Centre focuses on the discovery of biomarkers that can be used to diagnose, or inform, the treatment of diseases such as cancer and arthritis.
 - The Manchester Molecular Pathology Innovation Centre (MMPathIC) part of the Molecular Pathology Network established to develop diagnostic tools.
 - Manchester Academic Health Science Centre (MAHSC) HInM's research arm. The partnership's mission is to unite leading healthcare providers with world-class academics and researchers in Manchester, and so deliver high quality, high impact clinical research across the City Region.

³ Manchester City Council, A healthier Manchester, Locality Plan, 2017

- 1.13 The North of England has established a number of single entry points to the innovation pathway in Life Sciences to support this wealth of activity. This includes:
 - The N8 Research Partnership established in 2007, is a partnership of eight research-intensive universities which supports the establishment of multi-partner bio-economy and preclinical research programmes;
 - The Northern Health Science Alliance (NHSA) established in 2011, has delegated authority across the North's leading universities, researchintensive NHS trusts and four Academic Health Science Networks.
 - Connected Health Cities an NHSA flagship pilot project comprising Greater Manchester, North East and North Cumbria, the North West Coast and Yorkshire, which aims to develop a system that will continually improve care services and health; and
 - Local Enterprise Partnerships
- 1.14 Alongside Advanced Manufacturing/Materials, Energy and Digital, Health Innovation is one of four Prime Capabilities identified for the North of England by the Northern Powerhouse Independent Economic Review (NPIER)⁴. The Prime Capabilities are those economic groupings where the North of England has the genuinely differentiated competitive advantage at both national and international levels. The NPIER highlighted that the North has longestablished strengths in Life Sciences, Medical Technologies and Devices, and a growing competence in new and efficient service delivery models brought about by e-health and, crucially, the growing devolution of responsibilities for Health and Social Care.
- 1.15 The Government's recent Industrial Strategy for the UK (see below) highlights the strategic national need to develop and grow the UK's genomics capacity and capability. This sector of the UK economy has huge potential for growth, driven by the combined weight and collaboration of the NHS, academia and Life Science businesses.
- 1.16 Following health devolution, leaders and clinicians are now able to tailor budgets and priorities to directly meet the needs of local communities and improve the health and wellbeing of Manchester's residents. HInM has a pivotal role in realising this ambition, by attracting partners and investment within the life sciences sector, with a particular focus on precision medicine, to build on Manchester's considerable strengths in this field.
- 1.17 Over the last 12 months, HInM partners have been working with potential industry partners to identify opportunities to increase diagnostic biomarker capability and capacity, and accelerate the benefits to patients and clinicians of leading edge tests to identify the presence and susceptibility to disease.

⁴ TfN and SQW Ltd, Northern Powerhouse Independent Economic Review, 2016

This has involved extensive engagement not just with business, but also government officials including the Office of Life Science in the Department of Business, Energy, and Industrial Strategy (BEIS).

1.18 The proposition in the Part B report on this agenda, will set out how the Council can support HInM and its partners to address key market failures in genomic biomarker translation (from discovery to clinical practice) through the delivery of a programme of diagnostic biomarker translation and industrialisation, and subsequent Biomarker/Diagnostic Platforms Accelerator. The proposition will make a substantive contribution to: improving health outcomes for Manchester residents; developing personalised precision medicine for residents and patients; providing a range of high quality employment opportunities; and addressing the intents of the Industrial Strategy and Life Science.

2. Market Failure

2.1 While there is no shortage of academic activity and a significant body of research to support it, the highly speculative nature of the relevant research involved means that private investors are unwilling to invest in such activity until there is a track record of delivery, since financial return is realised only after substantial costs are incurred. The work to assess this proposition shows that a major reason for this is industry - the practical platforms for delivery are not always engaged early enough in the process, and as a result is unable to influence product definition in the most efficient manner.

2.2 This can be summarised as:

- Large scale industry (even the successful global players) do not always demonstrate the capacity to adapt their business models to new developments in the market, and embrace the innovations often to be found in smaller emerging companies with specialist skills; and
- The type of process which is characterised by these research and application activities often take time before they can be brought to fruition, and have a risk profile which do not lend themselves to traditional equity investors.
- 2.3 This broad assessment has given rise to the emergence of a new approach which is specifically designed to respond to these market failures. The proposal in response is to provide investment to underpin existing, and develop new capacity for existing business by establishing the essential platform for collaboration between academia and industry.

3. Employment and Wider Benefits

3.1 These activities will essentially be outward facing so that it can embrace new and appropriate activities wherever they emerge; and will have access to all the requisite skills to support research applications and contract development. It will have the ability to leverage synergies between academia, the National

Health Service (NHS), and industry and allow the development of precision medicine and diagnostics to progress more quickly, at larger scale, and with greater quality than would otherwise be the case. The need for biomarker development has been identified and tested by the strategic partnership set up between HInM and business.

- 3.2 The focus of the Corridor Manchester Life Sciences Enterprise Zone is to attract and develop businesses within the science and technology sectors, providing a strong platform for the development of an innovation cluster within the region's growing knowledge economy, and from which the growth and expansion of the Life Science sector in the region can be driven. Its aim is to support key growth sectors within one of the Manchester and GM's priority economic assets, located in the regional core of the economy. It fully aligns with and supports the ambitions and business plans of a wide range of local partners, and will significantly accelerate the pace of economic activity within this priority area for investment, for the benefit of the Manchester and GM economy as a whole.
- 3.3 The proposition in this report, and attached at Part B of this agenda includes investment to underpin existing and develop new capacity for existing business which will be dedicated to the translation and industrialisation of diagnostic biomarkers, which addresses global market failure, and which will function at the heart of the Oxford Road Corridor Enterprise Zone, and the knowledge assets of the city's universities and hospital trust. It will strengthen the existing Corridor Manchester offer and will be extremely valuable in the promotion of the region as a leading global centre for the life science industries. It will also deliver high value employment opportunities in a priority growth sector where average GVA per worker far exceeds national sector averages.
- 3.4 The City Council is supporting this proposition, and has the economic and well-being powers to enable it to lead on the local public sector funding support. Participation is completely aligned to the Our Manchester Strategy for the City and the Locality Plan with the focus on improving health outcomes. The proposal will deliver significant benefits to residents, both in terms of improving diagnostics, treatment and health outcomes, but also in ensuring that opportunities for local residents to gain the skills and access the significant high value jobs that will be created.
- 3.5 The impact of this proposition, and that of the wider innovation cluster which it will facilitate, will be local, national, and international in reach. The wider Corridor Manchester Campus which this proposition will be a key part of, could create over the long term around 1,500 highly-skilled jobs, and change the landscape around health innovation on a global scale.
- 3.6 The proposition will provide an immense boost to the Life Sciences sector in the UK, and increase its global competitive positioning and image. For the North, the decision to locate leading-edge activity in the region will add to the already growing confidence of Northern partners, and give further stimulus to the Northern Powerhouse. It will consolidate the role of the Life Sciences

sector in the sub-regional economy, and make a significant contribution to the goals of the Northern Powerhouse. Partners will extend the benefits right across the North, working through established and mature initiatives such as Connected Health Cities and the Northern Health Science Alliance (NHSA).

- 3.7 The Corridor Manchester Campus will comprise a cluster of clinicians, industrialists, and academics working together to develop the diagnostics, therapeutics, and delivery systems which will provide the NHS and other healthcare systems with safe, effective and affordable healthcare. The synergy that will be created, through an industry-led partnership with the University and MFT, will be of a scale and capability that will impact not only at local levels in terms of jobs and investment, but offer the prospect of reaching into national and international markets.
- 3.8 A number of jobs will also be safeguarded as the proposition provides the ability to contract with others who currently work in this field.
- 3.9 In summary this proposition will deliver:
 - A business model of global interest to address the market failures currently hampering the translation and industrialisation of diagnostic biomarkers;
 - A major contribution to biomedical research and diagnostic medicine in the UK, and North of England, delivering a fundamental component of the Government's Life Sciences Industrial Strategy;
 - Proposals to underpin existing and develop new capacity for existing business working in partnership with Manchester's devolved and integrated Health and Care system, to bring benefits to residents and patients;
 - The safeguarding of 215 jobs, and over a 10-year period the creation <u>directly</u> of around 250 new jobs. Added to this, up to a further 1,000 jobs are expected to be created indirectly in Corridor Manchester over the next decade, as a consequence of the direct employment effects that the investment will trigger. This agglomeration of applied innovation activity will help attract and retain the best science talent in Manchester, including new graduates from the universities.
 - A GVA impact of about £30m in Year 1 with a total cumulative GVA impact of about £140 million over a ten-year period.
- 3.10 As part of this initiative, further opportunities will be explored to develop apprenticeship programmes, participation in University training programmes to source in new talent, outreach and school-based learning, and to grow and strengthen the health science sector.

4. The Health Ecosystem and Health Outcomes

4.1 Manchester is one of the UK's top three biopharmaceutical clusters, and the city is home to pioneering health and Life Sciences innovation and research

- ecosystem. Functionally, these assets and facilities centre around two main innovation hubs as discussed in Section 1 above.
- 4.2 Over the last 15 years, Manchester has progressively developed a rich and deep network of agencies to advance the City's Health and Life Science agenda. The key actors include: Kratos Analytical, GSK and the Hitachi Big Data Laboratory.
- 4.3 Health devolution gives Greater Manchester the ability and flexibility to direct funding towards investments that are a priority for the Health & Social Care sector across the sub-region, and develop its own strategy. It involves working across 12 Clinical Commissioning Groups (CCGs) to align incentives and budgets to enable the adoption of innovation across the spectrum of care. As such, the devolution deal places GM in prime position to enable it to explore new delivery models for providing and personalising health services. HInM, is driving work to accelerate the joining up of this data, which will also include providing a secure environment for clinicians and innovators to derive insights which will drive new care pathways and innovative treatments for patients, and help to maintain and improve resident health.
- 4.4 HlnM will also see benefits from the powers gained by Greater Manchester, as more resources can be directed to specific goals such as developing Manchester as an internationally renowned location for Life Sciences excellence⁵.
- 4.5 GM and University of Manchester affiliated institutions, partnerships and hospital networks is a 'test bed' for innovation across health technology, including e-health, mobile health and personalised medicine. Healthcare organisations provide for a diverse and stable population of 3.5 million (across the GM AHSN area) and have a leading position in the number of commercial trials and patients recruited on the NIHR portfolio. Thriving biomarker discovery and clinical science provide a fertile environment for industrialising biomarkers and accelerating their entry into clinical practice and precision medicine delivery.
- 4.6 Aligned to the above is the changing landscape around health and health outcomes. The UK population, with others across the industrialised world, is now ageing markedly. Individuals are living longer, birth rates are at historically low levels, and a large cohort of individuals are now reaching retirement.
- 4.7 Such demographic changes have serious implications. Ageing will make increasing demands on health and care, with no identifiable prospect of resources matching demand, and so force the need for new and innovative models of diagnosis, treatment, management and delivery. This, in turn, will require better use of clinical datasets generated by researchers and health and care systems and innovative ways to develop new tools to diagnose and treat illness earlier. Key to this shift will be improvements in the processes for

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⁵ Health Innovation Manchester website

translating research findings (undertaken in health-facing, academic environments) on genomic predictors of illness into effective/cost-effective and industrialised solutions that can be brought to market for the benefit of the wider population.

- 4.8 Coupled with this, Greater Manchester has significant health inequalities in relation to the UK averages and across and between local authorities in Greater Manchester. Life expectancy is below the UK average, due to a higher incidence of disease caused by several risk factors. For example, in 50 per cent of Greater Manchester local authorities, smoking prevalence is significantly higher than the England average (20 per cent compared to 16.9 per cent).
- 4.9 These inequalities result in higher death rates in Greater Manchester and a higher incidence of cancer diagnosis compared to the UK average, with rates of cancer cases also around 10 per cent higher. This is likely to be partly due to higher numbers smoking in the city. Lung cancer is the most common cause of cancer death in Greater Manchester, with around 930 men and 790 women dying from the disease every year in the area. Bowel and breast cancers are the next biggest cancer killers around 320 men and 270 women die from bowel cancer in the city every year. And 420 women die from breast cancer in Greater Manchester every year.
- 4.10 In view of this, Manchester is the chosen location to develop this proposition because of: its internationally-recognised research and clinical assets in Cancer, Inflammatory Diseases, Genomic Medicine, and Biomarker Discovery; the City's devolved health and care economy; an innovation ecosystem which enables accelerated development and deployment into the Health and Care markets; and opportunities to translate this research and development to significantly improve the health outcomes of its residents.

5. Alignment with the Industrial Strategy

5.1 The Industrial Strategy proposition for the Life Sciences sector was formulated by Life Sciences Champion Professor Sir John Bell. The report, published in August 2017, and entitled Life Sciences Industrial Strategy⁶, highlighted that a strong Life Sciences sector could simultaneously benefit the UK economy and help improve health outcomes of the nation. It proposed that a joint programme of delivery between industry, the National Health Service (NHS) and Government be agreed to monitor and oversee the implementation of a globally-unique and international competitive Life Sciences ecosystem to deliver health and wealth. In November 2017, the UK Government published its Industrial Strategy⁷, setting out a long-term plan to boost the productivity and earning power of the UK. The strategy commits to increasing spending on R&D from 1.7 per cent GDP in 2015 to 2.4 per cent GDP in 2027. The Life Sciences sector lies at the heart of the Strategy, and was informed by the work of the Life Sciences Industrial Strategy. Life Sciences is also recognised

⁶ Life Sciences Industrial Strategy, November 2017

⁷ BEIS, Industrial Strategy: Building a Britain Fit for the Future, November 2017

- as a key sector for the UK as it moves towards a new relationship with the European Union, and creates a compellingly ambitious domestic landscape in which the UK is the country of choice for the design, development, and introduction of innovative health products.
- 5.2 Building on the work of Professor Sir John Bell, the UK Government and the Life Sciences sector have agreed a transformative, multi-billion-pound Sector Deal to ensure that the UK remains at the forefront of innovation in the sector. This Sector Deal will ensure new pioneering treatments and medical technologies are produced in the UK, improving patient lives, and driving economic growth. One of the four key themes of the Life Sciences Sector Deal is to grow the UK's international reputation for pioneering early diagnostics and genomics using the technologies of the future, with which this proposition fully aligns.
- 5.3 The Life Sciences Industrial Strategy put forward a set of recommendations which include encouraging collaboration between the NHS and industry. The NHS the public health services of England, Scotland, and Wales, has a crucial role to play in the Life Sciences policy arena, as the agenda of the latter is central to ensuring and improving the NHS for future generations; in terms of health outcomes, but also to better target healthcare provision to meet need in light of increasingly stretched and finite resources.
- 5.4 However, as well as economic imperatives, there are significant health ones as part of this proposition. Advances in genomics, together with developments in 'big data' and health-data analytics, have the ability to transform the future of early detection, diagnosis, and management of illness, making possible major strides in the prediction and prevention of disease, and the personalisation of treatments (i.e. personalised medicine). Not only will these advances improve patient outcomes but will also help reduce the burgeoning demand on health care services.

6. Commercial and Contractual Arrangements

- 6.1 The detailed commercial and contractual arrangements are set out in the Part B report attached to this agenda. It is proposed that Corridor Manchester Life Sciences Enterprise Zone business rates income of up to £23.4m will support this project.
- 6.2 These arrangements will ensure the Council's support to this project is aligned to outcomes and milestones, as well as timely delivery. In order to provide effective governance and oversight to these arrangements, there will be a strong Executive Management Group and a strong Board with clear scientific, commercial and financial representation that has transparent accountabilities to funders.
- 6.3 Quarterly monitoring on the achievement of milestones and the financial position will be undertaken with the requirement for these provisions to be built into the legal agreements. The City Treasurer will ensure the Chief Executive,

Leader and Executive Member for Finance are briefed and alerted to any issues.

7. Conclusion

- 7.1 Terms are being agreed to underpin the development of this proposition. The Council are confident that this development is an appropriate intervention in an established and growing market place that forms a key part of the GM Strategic Economic Plan.
- 7.2 The target market is to be the life science sub-sectors of Health and Medical Technologies encompassing digital health, diagnostics and precision medicine. The market for bio-science facilities on the Corridor Manchester EZ location has been established. However there remains a significant market failure and a shortterm shortfall in the required level of return, and gap funding which is required to ensure the project is viable. Extensive marketing and pipeline building activity will be undertaken, subject to the agreement of the arrangements set out in this report and the Part B report.

8. Exemption From Call In

8.1 In accordance with paragraph 18 of Part 4, Access to Information Procedure Rules and paragraph 14 of Part 4, Scrutiny Procedure Rules of the Council's constitution, and having consulted with and/or obtained the agreement of the relevant statutory officers and elected members, Executive is asked to approve this matter as urgent, in that any delay caused by the key decision and call-in processes, would seriously prejudice the legal or financial position of the Council or the interests of the residents of Manchester if the commercial and contractual arrangements are not agreed urgently and exempt it from call in

9. Contributing to the Manchester Strategy

(a) A thriving and sustainable city

9.1 The Council's support will accelerate economic growth in the region by enabling the translation and industrialisation of diagnostic biomarkers, through a programme of industrial R&D. The support will play an integral part in helping Manchester and the North of England enhance and diversify its excellence in the health and life science research and activity, and attract clusters of related industry activities. The Council will be working with partners in the Corridor Enterprise Zone to develop the ecosystem necessary to support and incentivise SME co-location in these activities, and maximising training and educational opportunities in this sector.

(b) A highly skilled city

9.2 Investment in the programme of industrial R&D will be undertaken through partnerships with the city's higher education institutions, in particular through the sharing of relevant IP, participation in university training programmes to source new talent, and will further support the city's drive for high calibre

graduate talent retention through job creation. It will act as a UK leader in health science and biomedical development to improve access for Greater Manchester people into health science jobs.

(c) A progressive and equitable city

9.3 The proposal will also improve health outcomes for Manchester and GM residents. The development of these health innovation activities have the ability to transform the future of early detection, diagnosis, and management of illness, making possible major strides in the prediction and prevention of disease, and the personalisation of treatments (i.e. personalised medicine). Not only will these advances improve patient outcomes but will also help reduce the burgeoning demand on health care services.

(d) A liveable and low carbon city

9.4 The benefits of the support are much broader than the direct impact on individual residents. They will improve health and wellbeing outcomes for all reducing the impact on health services, support the growth and creation of high value jobs, contribute to growing an international class Applied Health Innovation Campus – all help improve graduate retention, attract new and emerging business, all making the City an attractive place to live and work.

(e) A connected city

9.5 The Corridor Manchester EZ benefits from strong public transport links, and is well served by new pedestrian and cycle routes.

10. Key Policies and Considerations

(a) Equal Opportunities

10.1 A key outcome will be to capture significant employment opportunities within the Enterprise Zone, and ensure that local residents have the opportunity to compete for such job opportunities.

(b) Risk Management

10.2 Assessment, mitigation and management of risk will be overseen through the city council's governance arrangements and addressed in the commercial and contractual arrangements to be entered into by the Council.

(c) Legal Considerations

10.3 The Council is proposing to enter into a contractual and commercial arrangement together with such other ancillary agreements to promote and enable the Our Manchester strategy outcomes in job creation and economic sustainability. The City Council's legal team will continue to support the delivery of the contractual and commercial arrangements.

11. Recommendations

11.1 Recommendations can be found at the front of this report.