Interim results for the 6 months ended 31/12/2021

Dr Arron Tolley  
Chief Executive Officer & Founder  
arron.tolley@aptamergroup.com

Eleanor Brown (formerly Courtman-Stock)  
Chief Financial Officer  
eleanor.brown@aptamergroup.com

Dr David Bunka  
Chief Technical Officer & Founder  
david.bunka@aptamergroup.com
This presentation ("Presentation") contains forward-looking statements, including in relation to the financial position and prospects of Aptamer Group plc ("Company") and its group ("Group"). These forward-looking statements are not based on historical facts but rather on expectations and projections about the future based on information currently available to the Company and its directors, officers and employees. Forward-looking statements include, by way of example, statements regarding the Group's future growth, results of operations, performance, future capital and other expenditures (including the amount, nature and sources of funding thereof), competitive advantages, market position, industry trends, general economic conditions, financial results, business prospects and opportunities. Statements in this Presentation about future plans and intentions, results, level of activity, performance, goals or achievements or other future events constitute forward-looking statements. In some cases, these forward-looking statements can be identified by words such as “aim”, “anticipate”, “believe”, “expect”, “may”, “could”, “will”, “forecast”, “potential”, “intend”, “estimate”, “should”, “plan”, “predict” or the negative or other similar expressions but these words are not the exclusive means of identifying such statements. Any statement contained in this Presentation that are not statements of historical fact are forward-looking statements.

Such forward-looking statements are not guarantees of future performance and involve known and unknown risks, uncertainties, assumptions and other important factors beyond the control of the Company that could cause the actual results, level of activity, the development of its business, performance or achievements of the Company and its subsidiaries and investments to differ materially (positively or negatively) from those implied by such forward-looking statements. Forward-looking statements contained in this presentation speak only as of the date of preparation of this Presentation and have not been audited or otherwise independently verified. No representation or warranty is made as to the achievement or reasonableness of, and no reliance should be placed on, such forward-looking statements.

Statements in this Presentation reflect the knowledge and information available at the time of its preparation. Except as required by any applicable law or regulation, the Company expressly disclaims any obligation or undertaking, including to release publicly any updates or revisions to any statements contained in this presentation to reflect any change in the Company's expectations or any change in events, conditions or circumstances on which any such statement is based. No information included in this Presentation is intended to be a profit forecast, profit estimate or a financial projection or prediction or intended to imply that the earnings of the Company for the current or future financial periods will necessarily match or exceed the historical or published earnings of the Company and/or its subsidiaries.

This Presentation does not constitute or form part of any offer or invitation to purchase any securities of any person nor any offer or invitation to sell or issue, or any solicitation of any offer to purchase or subscribe for, any such securities, nor shall it or any part of it, or the fact of its distribution, form the basis of, or be relied on in connection with, any contract or commitment or investment decisions relating thereto, nor does it constitute a recommendation regarding any securities.
Presentation team

Dr Arron Tolley
CEO
- Co-founded Aptamer Group in 2008
- Globally-recognised technical & commercial leader in aptamers
- Delivered several patent-pending process and product developments
- Ph.D. Structural & Molecular Biology

Dr David Bunka
CTO
- Co-founded Aptamer Group in 2008
- Globally-recognised aptamer expert
- Pioneered automated in-house aptamer discovery platform
- Ph.D. Molecular Biology

Eleanor Brown
CFO
- Over 10 years in practice in Big Four firms, gaining a wealth of knowledge & experience across multiple sectors
- Chartered Accountant
- Joined Aptamer Group in 2018
Introduction to Aptamer Group
Aptamers address the challenges facing antibodies and alternatives

The antibody market is well established, but has well-known problems that are addressable with aptamers

**Value creating differentiating characteristics of aptamer affinity ligands**

**The current challenge**

- 50% of research antibodies fail to meet their internal research standards
- Expensive, unethical and increased scrutiny of animal-based research
- Antibodies are expensive to manufacture, transport and store

**Broader target applicability**
Lab based isolation of aptamer enables the use of targets that are not possible with antibodies e.g. whole tissues, toxins etc

**Synthetic manufacture allows better QC**
Well established chemical manufacture is more reliable and gives lower batch-to-batch variability than cell-based antibody manufacture

**Tuneable selectivity**
Aptamer isolation process is tailored to give the required target specificity. This cannot be incorporated into antibody generation

**Speed of Discovery**
Automated high throughput aptamer isolation can be achieved in as little as 17 days. Other binder technologies typically take 4 – 18 months

**Scalable cost-effective production**
Chemical synthesis is easier and cheaper to scale up, leading to significant savings in large scale manufacture.
The Optimer® platform

- An Optimer® is the **minimal aptamer sequence** which retains the ability to bind to the target.

- Optimer® binders have a **more stable structure** than the parental aptamer which results in **improved binding properties**.

- **Smaller molecular size** (<15 kDa compared to ~30 kDa for parent aptamer)
  - More cost-effective production
  - Greater yield during synthesis
  - Increased tissue penetration for targeted therapeutics
  - Interactions are closer to sensor surfaces giving better response in biosensors

A full-length aptamer (left) contains the target binding region (dark) and unnecessary sequences e.g. primers (pale). Removal of these unnecessary sequences leaves only the Optimer® (centre). Next Generation Optimers with protein-like properties are in development (right).
USP: Automated high-throughput discovery platform

*Tailored selection strategies, optimised for different target classes and applications, increases the potential for success in each Optimer® discovery campaign.*

- Teams of specialists, with distinct processes to address different target types (proteins, small molecules, cells etc.) = **broader process application**
- Incorporation of customers’ end application conditions increases likelihood that **aptamers will perform as required**
- Automation removes human error and variability from aptamer development = **increased reliability** and **higher success rates**
- Parallel processing under different conditions increases likelihood of identifying aptamers = **improved success rates (>70%)**
- Proprietary automated aptamer development platforms enable high-throughput processing = **rapid turnaround** and **high capacity**
- Bespoke integrated automation platform is **difficult and expensive for others to replicate**
- Processes are protected through **intellectual property and proprietary know-how**
- Modular automated platforms can be **readily scaled to increase capacity**
Aptamers are applicable in multiple verticals within the life sciences

The aptamer platform technology has demonstrated long-term value generation in several key verticals in the life sciences market, with high value opportunistic diagnostic and therapeutic licensing and milestone-based deals.

### Competitive Landscape

<table>
<thead>
<tr>
<th>Platform</th>
<th>Research reagents</th>
<th>Bioprocess</th>
<th>Diagnostics</th>
<th>Therapeutics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antibody</td>
<td>✓</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Camelid antibody fragment</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Bicycle</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Affimer</td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Darpin</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>

**Aptamer Group**  **Aptamers & Optimer®**

- ✓ Bioprocessing tools and diagnostic reagents have **faster route to market**
- ✓ Enabling therapeutics programs offers **high long-term value**
Aptamer Group revenue model

**Contract research services**
- Global research antibody market valued at $3.6bn in 2020
- Generating Revenues
- Bioprocessing (affinity purification)
- CMC / QC release reagents
- Research Reagents
- Horizon scanning

**Revenue model:** fee-for-service and licensing model
- Early-stage revenue
- We are not exposed to customers’ R&D risk
- We retain IP, which locks in downstream value

**Enabling Diagnostics**
- Global diagnostic speciality antibodies market valued at $19.9bn in 2020
- Lateral flow devices (LFD)
- Biosensor development
- Immuno-assays (ELISA)
- Applications across human health, environmental and agri-food

**Revenue model:** fee-for-service, royalties and licensing fee
- IP transfer/success fees
- Revenue layers-up
- Very high margin licence and royalty
- 1-2 years conversion timeframe

**Enabling Therapeutics**
- Global antibody therapeutic market worth in excess of $114bn in 2020
- Optimer-drug conjugate (ODC)
- Optimer-enabled delivery of gene therapies
- Optimer agonist/antagonists

**Revenue model:** fee-for-service, royalties and licensing fee
- IP transfer/success fees
- Revenue layers-up
- Very high margin licence fees
- 2-3 years conversion timeframe

Unique platform technology driving three business models generating revenue in the near-term, with potential for substantial value creation in the longer term

© Aptamer Group 2022
Generating long-term value across key pillars of the life science market: Selected signed commercial contracts

<table>
<thead>
<tr>
<th>Customer</th>
<th>Target / Area</th>
<th>Requirement</th>
<th>Commercials</th>
<th>Vertical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emerging life science tool company</td>
<td>Peptides</td>
<td>High value R&amp;D</td>
<td>£3.8m development fee, with up to £16m in licence fee and milestones</td>
<td>Research reagents</td>
</tr>
<tr>
<td>Emerging life science tool company</td>
<td>Peptides</td>
<td>High value R&amp;D</td>
<td>£2m development fee with up to £28m in licence fee and royalties</td>
<td>Research reagents</td>
</tr>
<tr>
<td>CMC provider</td>
<td>Gene therapy</td>
<td>Therapeutic CMC</td>
<td>Upfront development fee with double digit royalties</td>
<td>Bioprocessing</td>
</tr>
<tr>
<td>Top 10 Pharma</td>
<td>CNS Vaccine</td>
<td>Therapeutic CMC</td>
<td>Upfront development fee with yearly licence fee</td>
<td>Bioprocessing</td>
</tr>
<tr>
<td>Top 10 Pharma</td>
<td>Vaccine Product</td>
<td>Therapeutic CMC</td>
<td>Upfront development fee, IP ownership</td>
<td>Bioprocessing</td>
</tr>
<tr>
<td>Specialist Respiratory Dx company</td>
<td>Respiratory disease</td>
<td>Dx IVD</td>
<td>Upfront development fee, milestones and up to double digit royalties</td>
<td>Diagnostic reagents</td>
</tr>
<tr>
<td>Top 10 Pharma</td>
<td>Antibiotics</td>
<td>Antibiotic Resistance</td>
<td>Upfront development fee. Flat IP Transfer fee.</td>
<td>Diagnostic reagents</td>
</tr>
<tr>
<td>AstraZeneca</td>
<td>Kidney</td>
<td>Therapeutic DD</td>
<td>50% ownership of IP</td>
<td>Therapeutic delivery</td>
</tr>
<tr>
<td>CRUK</td>
<td>Heam-Onc</td>
<td>Therapeutic DD</td>
<td>35% of the economic value of the asset</td>
<td>Therapeutic delivery</td>
</tr>
<tr>
<td>Stealth Biotech</td>
<td>Hepatic</td>
<td>Therapeutic DD</td>
<td>Upfront development fee, IP ownership</td>
<td>Therapeutic delivery</td>
</tr>
<tr>
<td>Biotech</td>
<td>Heam-Onc</td>
<td>Therapeutic DD</td>
<td>Joint IP</td>
<td>Therapeutic delivery</td>
</tr>
</tbody>
</table>

Spread across 3 key pillars of life sciences market, allowing multi-shot on goal strategy leading to shared IP, licensing and royalty-based deals in most cases
Growth strategy to expand core capabilities & market share

Underpinned by £10.8m IPO fundraise, Aptamer Group intend to accelerate growth and increase value capacity over multiple verticals to deliver more solutions and higher value engagements.

**Scale-up & Automation**
To increase the capacity, enabling simultaneous handling of hundreds of targets

**Novel Nucleotide Chemistries**
To develop our proprietary scaffold technologies & protection of these technologies via patents

**Commercial expansion and service development**
To accelerate commercial expansion, service development and upgrade systems & IT in line with expanded business’ requirements

**Working Capital**
Working capital during expansion & delivery of strategic plan

© Aptamer Group 2022
Operational review
Key highlights for H1 2022

Aptamer Group

- Raised gross proceeds of £10.8 million in conjunction with AIM listing on 22 December 2021
- Board appointments of Ian Gilham as Chairman and Angela Hildreth

Aptamer Solutions

- Contract secured with a top five global pharma company to develop Optimer® binders as QC reagents for novel neurodegenerative disease vaccine (Jul)
- Two large commercial agreements signed with public life science companies to develop Optimer® ligands, one of which is for use on proteomic and multiplex platforms (Aug, Oct)
- Agreement to co-develop a new affinity purification resins for improved purification of gene therapy vector manufacturing, Bio-Works Technologies (Aug)

Aptamer Diagnostics

- Entered a partnership with ProAxs to develop Optimer® binders to replace the antibodies in their respiratory diagnostic assays (Aug)
- Expansion of partnership with DeepVerge, following successful evaluation of SARS-CoV-2 Optimer® performance in their wastewater monitoring platform. Exploring new Optimer® binders for additional microbial testing capabilities within the DeepVerge wastewater monitoring platform (Nov)

Aptamer Therapeutics

- Signed a Research collaboration with WuXi AppTec Research Services Division to identify new Optimer®-enabled therapeutics (Jul)
- Commenced proof-of-concept project with PinotBio for the development of an Optimer®-drug conjugate for use as a chemotherapeutic delivery vehicle (Jul)
Post-period end highlights

**Aptamer Diagnostics**

- Optimer® binder to the SARS-CoV-2 Spike protein, developed using the Company's proprietary discovery and development platform, was proven to detect Omicron
- Optimer®-enabled monitoring system installed at multiple UK sites as part of Environmental Monitoring for Health Protection (EMHP) program, to detect SARS-CoV-2 in wastewater (Mar), Deepverge
- Contract signed with a precision oncology company to develop Optimer® binders for use in a companion diagnostic assay (Feb)

**Aptamer Therapeutics**

- Continuation of the collaboration with AstraZeneca to support development of Optimer® binders as next-generation drug delivery vehicles in kidney disease (Jan)
- Successful conclusion of the proof-of-concept work with PinotBio enabling the delivery of their payload using Optimer®-drug conjugates in precision oncology. We are now looking to extend this partnership and are exploring options around appropriate targets (Feb)
Post-IPO Progress: R&D

- Work to integrate our novel nucleotide chemistry platform is underway. This will integrate 10 years of acquired development work, in the field of nucleotide chemistry, into a new platform called Optimer®+, which we believe will:
  - Broaden applications and improve the performance of existing Optimer® technology
  - Be a strong differentiator to enter new markets, address new targets and give us a proprietary position
  - Give us an increased share of the affinity ligand market
- We aim to evaluate the performance of this technology over the coming months
- Our R&D developments underpin our existing strong intellectual property position
Post-IPO Progress: Scaling capacity and expanding the team

• Scaling of current Optimer® development platform to service expected demand
  • Scale-up includes expanding automation systems and increasing capacity of the current platform
  • Additional equipment is being purchased to remove process bottlenecks

• In commercial discussions around the re-fit of larger premises, required to support growth in the team and equipment
  • Aptamer Group is expected to move into new premises in mid- to late- 2022

• Continuing to hire experienced scientists to support growth

• Appointment of Ross Wheatcroft (ex Abcam) as Chief Commercial Officer for Aptamer Group (Jan)

• Building an assay development team within R&D to demonstrate Optimer® function; providing turn-key solutions for current and future customers as an additional service offering
Financial review
Financial highlights

- Revenue has increased by 183% to £1.4 million (H1 2021: £0.5m) as a consequence of the focus on revenue growth and the improvement in commercial traction, which has continued to date during H2.
- Cash balance increased to £9.8 million (31 December 2020: £1.0 million, 30 June 2021: £0.4m)
  - Following receipt of £9.6m net proceeds from the Placing.
- EBITDA loss of £1.0m (H1 2021: loss £1.0m);
  - Includes a one-off, non-cash, share-based payment charge of £0.3m for a warrant issued in relation Admission to AIM.
Comprehensive income

- Focus on revenue growth driving increased turnover; revenue has been generated from the provision of contract research services in all three business units

- GPM has improved as a result of more capacity being filled; a large proportion of cost of sales is semi-fixed labour. However, our operational leverage is significant

- Underlying EBITDA has improved, although costs have increased as the business expands its capabilities

- Average headcount H1 2022: 37 (H1 2021: 31)

- Total headcount December 2021: 41 (December 2020: 33); increases in H1 and those planned for H2 2022 to expand commercial, production and R&D capabilities and offer turn-key life sciences solutions
Financial position

- Non-current assets – During H1 2022 the Company invested in capital equipment to remove some of the production bottlenecks; further improvements planned for H2 2022 as the placing proceeds are deployed to support further revenue growth. A new lease starting on 1 July 2021 created a Right-of-Use asset addition of £120k during H1 2022.

- Current assets – the main increase in current assets arises as a result of the placing; £9.6m net proceeds; the Company is well-funded to execute its strategic objectives. Smaller increases in stock and trade debtors in line with increased sales activity.

- Current liabilities – main drivers of increase:
  - Deferred income of £950k at 31/12/2021 (£543k at 30/6/2021)
  - Refund liability of £664k in relation to a contract signed during the period (30/6/2021: £nil)
  - Increased trade payables and accruals as a result of IPO costs and capex in December
Financial outlook

- The Group anticipates higher revenues in the second half of the year as many of the current development projects near completion and full invoicing can be recognised or secondary phases initiated.
- The second half of the financial year has already seen contracts signed with new and existing customers.
- The Group is confident of further announcements on partnering progress and new partnerships in the second half.
- The strong performance of the business, together with key R&D initiatives and the Group’s strong financial position following IPO, mean that Aptamer Group is trading in line with Board expectations for the full year.
Summary & outlook
Delivering the next chapter

• The strong growth in H1 2022 has reinforced that there is both market need and demand for aptamer technology to support innovation across the life science industry and that Aptamer Group has a clear, differentiated technology offering

• Commercial traction building in EU, USA, and key global markets, such as the APAC, across all business units

• Capacity expansion of current Optimer® platform and development of Optimer®+ has started to support a future increased service offering and market share

• Premises selected for new facilities to support expansion of the team and increased automation, anticipated mid- to late-2022
Summary

- **Solve intractable problems** for biotech and big pharma by developing aptamers, which are a disruptive technology with advantages over antibodies.

- Disrupting the market with a proprietary, **scalable automated platform** for rapid aptamer discovery.

- Provide customers with cost savings, higher quality binders and more specific binders with **higher project success rates**.

- Blue-chip customer base with **75% of global top 20 pharma** companies.

- Protect future revenue by **IP retention leading to future upside** potential through licensing and milestone payments.

- Improved gross profit margins H1 2022 v H1 2021, reflecting the benefits of our operational leverage.

- **£10.8m raised at IPO in December 2021**, meaning the Company is well-funded to execute its growth plans.
Appendix
Intellectual Property: we protect our position

We own approximately 75 patent rights (granted and pending) in various global territories. With 16 different patent families split across: novel aptamer-based diagnostic platforms, novel binding chemistries and specific aptamers against commercial targets of interest.

Passive income strategy leveraging default position on IP retention allowing us to patent commercially viable aptamers and licence to customers for long term value.

<table>
<thead>
<tr>
<th>Method of IP Protection</th>
<th>Current Patent Portfolio:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• <strong>Granted Patents</strong> (12 patent families)</td>
</tr>
<tr>
<td></td>
<td>o ~25 patents covering novel nucleotide chemistries and manufacturing of novel chemistries</td>
</tr>
<tr>
<td></td>
<td>• <strong>Filed Target &amp; Method Patents</strong> (4 patent families)</td>
</tr>
<tr>
<td></td>
<td>o SARS-COV-2 Spike</td>
</tr>
<tr>
<td></td>
<td>o Imatinib &amp; Irinotecan (cancer drugs)</td>
</tr>
<tr>
<td></td>
<td>o Nucleic Acid Based Detection Methods</td>
</tr>
<tr>
<td></td>
<td>• <strong>To be filed</strong> (5 patent families)</td>
</tr>
<tr>
<td></td>
<td>o SARS-COV-2 proteins</td>
</tr>
<tr>
<td></td>
<td>o Food Testing and Safety</td>
</tr>
<tr>
<td></td>
<td>o Human Fertility / Hormone assays</td>
</tr>
<tr>
<td></td>
<td>o Novel ApDC scaffold or ApDC selection methods</td>
</tr>
</tbody>
</table>
Building momentum with the Optimer® platform

- **AstraZeneca**
  - Extension of strategic collaboration with AstraZeneca developing drug delivery solutions for kidney disease

- **PINOTBIO**
  - Major therapeutics co-development partnership based on novel linker drug technologies for development of Optimer® Drug Conjugates

- **Development of specific Optimer reagents to the agreed range of targets, the Optimer® binders will be available to Takeda to evaluate for the feasibility of working with their drug compounds**

- **Targeting significant commercial contracts across all verticals with high upfront fees and substantial milestone, licencing and royalty revenue**

**Q4 2019**
- **CANCER RESEARCH UK**
  - Paid partnership for drug development programme for the treatment of Myeloid malignancies

**Q4 2020**
- **ValitaCell**
  - Major technical milestone hit with development of next-generation drug development screening platform

**Q1 2021**
- **DEEPVERGE**
  - Major technical milestone hit clinical validation of Optimer® binders against COVID in an electrochemical sensor

- **Acquisition of Novel Nucleotide Chemistry**

**Q2 2021**
- **Q3 2021**
- **Q1 2022**
- **Aptamer Group signs large commercial agreement with a life science research company for reagents for proteomics research with potential multi-million revenue pay**

© Aptamer Group 2022
Board appointments

- Board appointments of Ian Gilham as Chairman, and Angela Hildreth and Dr John Richards as Non-Executive Directors

**Dr Ian Gilham**  
Chairman  
- Former Non-Executive Chairman at Horizon Discovery plc  
- Non-Executive Chairman at GeneDrive plc  
- Former CEO Axis-Shield plc  
- Joined Aptamer Group in 2021

**Dr John Richards**  
NED  
- Expert in scale up and manufacture of pharmaceutical oligonucleotides  
- Former Sr Vice President, Novartis  
- Former Sr Vice President, HoPD The Medicines Company  
- Joined Aptamer Group in 2021

**Angela Hildreth**  
NED  
- Finance Director at Futura Medical plc  
- Expertise and commercial knowledge specialising in the pharmaceutical sector  
- >10 years operating at a senior level  
- AIM Listing experience  
- Joined Aptamer Group in 2021
Shozo Fujita
SAB

• Expertise in aptamer development and applications
• Developed functional aptabiosensors and novel aptamer-based nucleotide chemistries
• Founding partner of Apta Biosciences
• Joined Aptamer Group in 2021

Prof Paul Townsend
SAB

• Executive Dean of the Faculty of Health and Medical Sciences and Pro Vice-Chancellor at the University of Surrey
• Co-founder of Karus Therapeutics, in 2005
• Honorary Professorships at: the Division of Cancer Sciences at the University of Manchester (UK); National Kapodistrian University of Athens (Greece); and at A*STAR (Singapore)
• Joined Aptamer Group 2014

Prof Rick Body
SAB

• Professor of Emergency Medicine at the University of Manchester, and an Honorary Consultant in Emergency Medicine and the Group Director of Research & Innovation at Manchester University NHS Foundation Trust
• Co-leads the SARS-CoV-2 National Diagnostic Research & Evaluation Platform (CONDOR), which has provided holistic evaluation of multiple commercially supplied in vitro diagnostic tests (IVDs) for SARS-CoV-2
• Joined Aptamer Group 2021

Additional members of the Scientific Advisory Board are being recruited to further strengthen the team