
UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 6-K

REPORT OF FOREIGN PRIVATE ISSUER
PURSUANT TO RULE 13a-16 OR 15d-16
UNDER THE SECURITIES EXCHANGE ACT OF 1934

For the month of September 2020

Commission File Number: 001-38764

APTORUM GROUP LIMITED

17 Hanover Square
London W1S 1BN, United Kingdom
(Address of principal executive offices)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F: Form 20-F Form 40-F

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1):

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7):

On September 1, 2020 Aptorum Group Limited (the “Company”) issued three press releases. A copy of each of the press releases is attached hereto as Exhibit 99.1, Exhibit 99.2 and Exhibit 99.3. We are also filing this report to disclose the revised power point presentation the Company will use during corporate presentations; such power point presentation is attached hereto as Exhibit 99.4 and is incorporated herein by reference.

Neither this report nor the exhibits attached constitutes an offer to sell, or the solicitation of an offer to buy our securities, nor shall there be any sale of our securities in any state or jurisdiction in which such offer, solicitation or sale would be unlawful prior to the registration or qualification under the securities laws of any such state or jurisdiction.

The information in this Form 6-K, including the exhibits shall not be deemed to be “filed” for the purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and shall not be incorporated by reference into any filing under the Securities Act of 1933, as amended, except as shall be expressly set forth by specific reference in such filing.

This Form 6-K is hereby incorporated by reference into the registration statements of the Company on Form S-8 (Registration Number 333-232591) and Form F-3 (Registration Number 333-235819) and into each prospectus outstanding under the foregoing registration statements, to the extent not superseded by documents or reports subsequently filed or furnished by the Company under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended.

EXHIBIT INDEX

| Exhibit No. | Description |
|--------------------|-------------------------------|
| 99.1 | Press Release |
| 99.2 | Press Release |
| 99.3 | Press Release |
| 99.4 | Power Point |

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Aptorum Group Limited

Date: September 1, 2020

By: /s/ Sabrina Khan

Name: Sabrina Khan

Title: Chief Financial Officer

EXHIBIT INDEX

| Exhibit No. | Description |
|-------------|-------------------------------|
| 99.1 | Press Release |
| 99.2 | Press Release |
| 99.3 | Press Release |
| 99.4 | Power Point |



Aptorum Group Limited Reports Financial Results and Business Update for the Six Months Ended June 30, 2020

NEW YORK--(BUSINESS WIRE)-- Aptorum Group Limited (NASDAQ: APM, Euronext Paris: APM) (“Aptorum Group” or the “Company”), a biopharmaceutical company focuses on the development of novel therapeutics to address global unmet medical needs, today provided a business update and announced financial results for the six months ended June 30, 2020.

“I am pleased with the developments that were achieved during the first half of 2020 despite the challenges presented by the COVID-19 pandemic,” said Mr. Ian Huen, Chief Executive Officer and Executive Director of Aptorum Group. “Throughout the COVID-19 crisis, we remained focused on advancing the development of our therapeutic programs. As announced today, further positive data showing significant *in vivo* activities of ALS-4 (for MRSA wound healing and MRSA bacteraemia) and also *in vitro and in vivo* studies of SACT-1 (for neuroblastoma and other potential tumor types). Also, as an emerging company, we have been expanding our global strategic presence. In July, Aptorum Group became the first Nasdaq listed biopharmaceutical company admitted to trading on Euronext Paris. We are also delighted about 3 new appointments we made to support the development of our various programs. Looking forward, we remain committed to accelerating the Company’s commercial growth and transformation into a biopharmaceutical company with exciting clinical stage assets being developed.”

Clinical Pipeline Update and Upcoming Milestones

SACT-1—lead program of the Smart-ACT™ platform, a repurposed drug for neuroblastoma and others: Undergoing preparation and on track for IND submission to commence Phase 1b/2a human clinical trials targeting the US FDA’s 505(b)(2) pathway. Further *in vitro* screening to assess SACT-1’s potential effect on over 300 cancer cell lines has been completed and showed promising effect on including, but not limited to, colorectal cancer, leukemia and lymphoma.

ALS-4—lead program of the Acticle platform, a small drug molecule candidate for methicillin resistant Staphylococcus aureus (“MRSA” superbug): ALS-4 is undergoing final stages of IND enabling studies and is targeted for regulatory submission in Q4 2020 to commence a Phase 1 human clinical trial thereafter.

CLS-1—lead program of the Claves platform, a macromolecule approach for obesity: Currently in lead optimization stage, aimed for IND enabling studies to commence in 2021.

NLS-2 NativusWell®—a dietary supplement for woman’s health, including menopause and osteoporosis: Undergoing registration in the United Kingdom, Europe and Asia, aimed for distribution to market in 2020.

Corporate Highlights

Commenced trading on Euronext Paris stock exchange:

Aptorum Group became the first Nasdaq listed biopharmaceutical company admitted to trading on Euronext Paris. The Class A Ordinary Shares of Aptorum Group have commenced trading on the Professional Compartment of Euronext in Paris under the Euronext ticker symbol “APM” and ISIN Code: KYG6096M1069 on 24 July 2020.

Three new personnel appointed to Aptorum Group’s team:

- **Dr. Herman Weiss, M.D.**, Chief Executive Officer and Executive Director of Claves Life Sciences Limited and Senior Medical Advisor of Aptorum Group
- **Dr. Kira Sheinerman**, Senior Strategic Consultant of Aptorum Group
- **Dr. Robbie Majzner**, Scientific Advisor of Aptorum Group

Financial Results for the Six Months Ended June 30, 2020

Aptorum Group reported a net loss of \$7.0 million for the six months ended June 30, 2020 compared to \$9.6 million for the same period in 2019. The decrease in net loss in current period was driven by decrease in interest expenses, net of \$3.6 million, partly offset by the increase in research and development expenses by \$1.6 million.

Research and development expenses were \$4.3 million for the six months ended June 30, 2020 compared to \$2.7 million for the same period in 2019. The increase was primarily due to the increase in consultation service provided by our consultants, advisory and contracted research organization as a result of the progress of our projects’ development.

General and administrative fees were \$2.1 million for the six months ended June 30, 2020 compared to \$3.2 million for the same period in 2019. The decrease was mainly driven by the decrease in bonus related expenses to our directors, employees, external consultants and advisors. Also, there was a significant decrease in business trips and sponsoring conference in 2020 due to the outbreak of COVID-19.

Legal and professional fees were \$1.5 million for the six months ended June 30, 2020 compared to \$2.0 million for the same period in 2019. The decrease in legal and professional fees was mainly due to the decrease of consultancy service fees during the period.

Interest expenses, net were \$0.1 million for the six months ended June 30, 2020 compared to \$3.7 million for the same period in 2019. The decrease in interest expenses, net was mainly due to the convertible debts were fully repaid in 2019. The interest expenses, net for the six month ended June 30, 2019 contained \$3.1 million amortization of beneficial conversion feature of our convertible debts.

As of June 30, 2020, cash, restricted cash and marketable securities totaled approximately \$4.4 million and total equity was approximately \$17.5 million.

Aptorum Group expects that its existing cash, restricted cash and marketable securities, together with undrawn line of credit facility from related parties, will enable it to fund its operating and capital expenditure requirements to the end of 2021.

APTORUM GROUP LIMITED
CONDENSED CONSOLIDATED BALANCE SHEETS
(Stated in U.S. Dollars)

| | June 30, 2020 (Unaudited) | December 31, 2019 |
|---|---------------------------------|----------------------|
| ASSETS | | |
| Current assets: | | |
| Cash | \$ 4,019,324 | \$ 5,189,003 |
| Restricted cash | 104,170 | 104,170 |
| Digital currencies | 1,539 | 1,539 |
| Accounts receivable | 41,696 | 40,543 |
| Inventories | 34,318 | 34,185 |
| Marketable securities, at fair value | 303,049 | 1,063,111 |
| Investments in derivatives | 102,087 | 203,320 |
| Amounts due from related parties | - | 962 |
| Due from brokers | 160,334 | 317,005 |
| Other receivables and prepayments | 1,361,502 | 1,079,043 |
| Total current assets | 6,128,019 | 8,032,881 |
| Property, plant and equipment, net | 6,140,602 | 7,093,035 |
| Operating lease right-of-use assets | 705,890 | - |
| Non-marketable investments | 8,748,119 | 7,112,180 |
| Intangible assets, net | 1,220,650 | 1,311,683 |
| Amounts due from related parties | - | 50,000 |
| Long-term deposits | 335,878 | 294,606 |
| Other non-current asset | 29,917 | 59,833 |
| Total Assets | \$ 23,309,075 | \$ 23,954,218 |
| LIABILITIES AND EQUITY | | |
| LIABILITIES | | |
| Current liabilities: | | |
| Amounts due to related parties | \$ 112,013 | \$ 41,593 |
| Accounts payable and accrued expenses | 2,500,566 | 2,586,527 |
| Finance lease liabilities, current | 47,954 | 46,555 |
| Operating lease liabilities, current | 419,875 | - |
| Total current liabilities | 3,080,408 | 2,674,675 |
| Finance lease liabilities, non-current | 72,986 | 97,319 |
| Operating lease liabilities, non-current | 319,938 | - |
| Loan payables to related parties | 2,313,358 | 6,330,472 |
| Total Liabilities | \$ 5,786,690 | \$ 9,102,466 |
| Commitments and contingencies | - | - |
| EQUITY | | |
| Class A Ordinary Shares (\$1.00 par value; 60,000,000 shares authorized, 7,950,986 shares issued and outstanding at June 30, 2020 and 6,597,362 shares issued and outstanding at December 31, 2019, respectively) | \$ 7,950,986 | \$ 6,597,362 |
| Class B Ordinary Shares (\$1.00 par value; 40,000,000 shares authorized, 22,437,754 shares issued and outstanding as at June 30, 2020 and December 31, 2019) | 22,437,754 | 22,437,754 |
| Additional paid-in capital | 33,184,104 | 24,887,624 |
| Accumulated other comprehensive income (loss) | 25,618 | (5,552) |
| Accumulated deficit | (43,760,545) | (37,555,980) |
| Total equity attributable to the shareholders of Aptorum Group Limited | 19,837,917 | 16,361,208 |
| Non-controlling interests | (2,315,532) | (1,509,456) |
| Total equity | 17,522,385 | 14,851,752 |
| Total Liabilities and Equity | \$ 23,309,075 | \$ 23,954,218 |

APTORUM GROUP LIMITED
CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE INCOME (LOSS)
(Stated in U.S. Dollars)

| | For the six months ended | |
|---|--------------------------|-----------------------|
| | June 30, | |
| | 2020 | 2019 |
| | (Unaudited) | (Unaudited) |
| Revenue | | |
| Healthcare services income | \$ 327,273 | \$ 239,792 |
| Operating expenses | | |
| Costs of healthcare services | (436,171) | (371,218) |
| Research and development expenses | (4,315,033) | (2,714,217) |
| General and administrative fees | (2,076,634) | (3,232,916) |
| Legal and professional fees | (1,540,304) | (2,008,774) |
| Other operating expenses | (641,457) | (120,788) |
| Total operating expenses | <u>(9,009,599)</u> | <u>(8,447,913)</u> |
| Other income (loss) | | |
| Gain on investments in marketable securities, net | 192,134 | 315,977 |
| Gain on non-marketable investment | 1,635,939 | 1,147,199 |
| (Loss) gain on investments in derivatives, net | (101,233) | 310,195 |
| Realized gain on use of digital currencies | - | 12,334 |
| Changes in fair value of warrant liabilities | - | (866,300) |
| Gain on extinguishment of convertible debts | - | 1,198,490 |
| Interest expense, net | (144,226) | (3,678,566) |
| Sundry income | 111,398 | 128,444 |
| Total other income (loss), net | <u>1,694,012</u> | <u>(1,432,227)</u> |
| Net loss | <u>\$ (6,988,314)</u> | <u>\$ (9,640,348)</u> |
| Less: net loss attributable to non-controlling interests | (783,749) | (551,877) |
| Net loss attributable to Aptorum Group Limited | <u>\$ (6,204,565)</u> | <u>\$ (9,088,471)</u> |
| Net loss per share – basic and diluted | \$ (0.21) | \$ (0.31) |
| Weighted-average shares outstanding – basic and diluted | <u>29,956,393</u> | <u>28,978,151</u> |
| Net loss | <u>\$ (6,988,314)</u> | <u>\$ (9,640,348)</u> |
| Other Comprehensive income (loss) | | |
| Exchange differences on translation of foreign operations | 31,170 | 2,000 |
| Other Comprehensive income | 31,170 | 2,000 |
| Comprehensive loss | <u>(6,957,144)</u> | <u>(9,638,348)</u> |
| Less: comprehensive loss attributable to non-controlling interests | (783,751) | (551,877) |
| Comprehensive loss attributable to the shareholders of Aptorum Group Limited | <u>(6,173,393)</u> | <u>(9,086,471)</u> |

About Aptorum Group Limited

Aptorum Group Limited (Nasdaq: APM, Euronext Paris: APM) is a pharmaceutical company dedicated to developing and commercializing novel therapeutics to tackle unmet medical needs. Aptorum Group is pursuing therapeutic projects in orphan diseases, infectious diseases, metabolic diseases, woman's health and other disease areas.

For more information about Aptorum Group, please visit www.aptorumgroup.com.

For further general presentation, please visit:

<https://ir.aptorumgroup.com/static-files/ca36cc65-6f23-4105-895e-f5f234ecca1e>

Disclaimer and Forward-Looking Statements

This press release does not constitute an offer to sell or a solicitation of offers to buy any securities of Aptorum Group.

This press release includes statements concerning Aptorum Group Limited and its future expectations, plans and prospects that constitute "forward-looking statements" within the meaning of the US Private Securities Litigation Reform Act of 1995. For this purpose, any statements contained herein that are not statements of historical fact may be deemed to be forward-looking statements. In some cases, you can identify forward-looking statements by terms such as "may," "should," "expects," "plans," "anticipates," "could," "intends," "target," "projects," "contemplates," "believes," "estimates," "predicts," "potential," or "continue," or the negative of these terms or other similar expressions. Aptorum Group has based these forward-looking statements, which include statements regarding projected timelines for application submissions and trials, largely on its current expectations and projections about future events and trends that it believes may affect its business, financial condition and results of operations.

These forward-looking statements speak only as of the date of this press release and are subject to a number of risks, uncertainties and assumptions including, without limitation, risks related to its announced management and organizational changes, the continued service and availability of key personnel, its ability to expand its product assortments by offering additional products for additional consumer segments, development results, the company's anticipated growth strategies, anticipated trends and challenges in its business, and its expectations regarding, and the stability of, its supply chain, and the risks more fully described in Aptorum Group's Form 20-F and other filings that Aptorum Group may make with the SEC in the future and the prospectus that received the French Autorité des Marchés Financiers visa n°20-352 on 16 July 2020. As a result, the projections included in such forward-looking statements are subject to change and actual results could be materially different from those described herein.

Aptorum Group assumes no obligation to update any forward-looking statements contained in this press release as a result of new information, future events or otherwise.

This announcement is not a prospectus within the meaning of the Regulation (EU) n°2017/1129 of 14 June 2017 as amended by Regulations Delegated (EU) n°2019/980 of 14 March 2019 and n°2019/979 of 14 March 2019.

This press release is provided “as is” without any representation or warranty of any kind.

Investor relations

Aptorum Group limited
Investor Relations Department
Tel: +44 020 80929299
Email: investor.relations@aporumgroup.com

Redchip – Financial Communications United States
Investor relations
RedChip Companies, Inc.
dave@redchip.com
+1 407 491 4498

Actifin – Financial Communications Europe
Investor relations
Ghislaine Gasparetto
ggasparetto@actifin.fr
+33 1 56 88 11 22



Aptorum Group Announces Further Positive Data on SACT-1 against Neuroblastoma and other Potential Tumor Types

NEW YORK -- (BUSINESS WIRE) – Aptorum Group Limited (NASDAQ: APM, Euronext Paris: APM) (“Aptorum Group”), a biopharmaceutical company focused on the development of novel therapeutics including orphan diseases and oncology indications, announced further positive data from its latest *in vivo* studies showing significant activity against neuroblastoma tumor reduction when treated with its lead compound SACT-1 in combination with standard of care (SOC) chemotherapy. Separately, SACT-1 was also screened for its *in vitro* activity against over 300 cancer cell lines and showed positive results in a number of cancer types including in particular colorectal cancer, leukemia and lymphoma, etc.

Our repurposed drug candidate, SACT-1 is undergoing preparation for IND submission and is on track for regulatory application to target to commence phase 1b/2a clinical trials under the US FDA’s 505(b)(2) pathway.

“Neuroblastoma is one of the most prevailing solid tumor cancers in children, representing 8% - 10% of all childhood tumors, accounting for c. 15% of all cancer related deaths in the pediatric population¹. For the high-risk patient group, the 5-year survival rate of this condition is around 40-50% as observed by the American Cancer Society² based on existing treatment. We are delighted to see the progress of our SACT-1, one of our first assets from our SMART-ACT[®] platform. We are extremely excited to observe SACT-1’s significant effect on tumor shrinkage when used in combination with standard of care chemotherapy in our latest *in vivo* studies. Moreover, we believe that SACT-1 may have potential applications in a number of other cancer types, including non-orphan cancers, which we will be continuing to investigate further for its wider application,” said Dr. Clark Cheng, the Chief Medical Officer and Executive Director of the company.

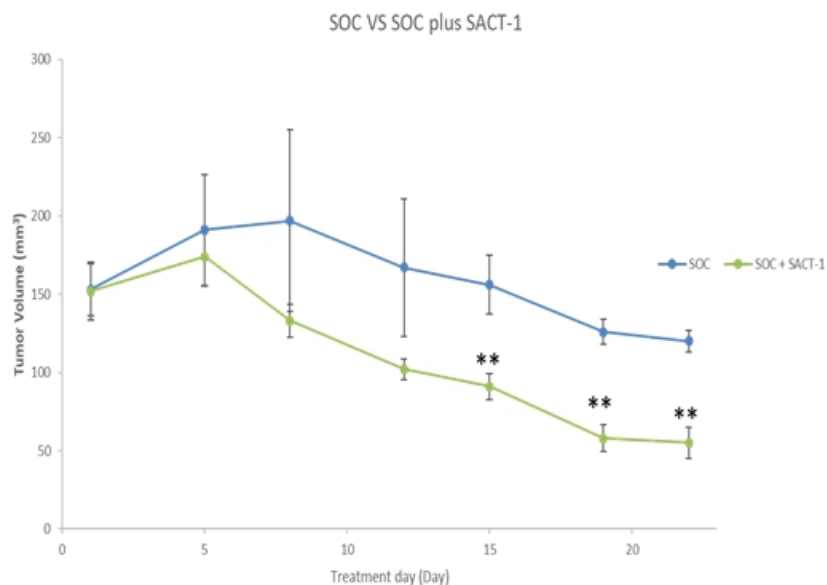
Summary of our *in vivo* assessment against neuroblastoma and *in vitro* assessment against other cancers are discussed below.

¹ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3668791/#:~:text=Neuroblastoma%20is%20the%20most%20common,deaths%20in%20the%20pediatric%20population.>

² <https://www.cancer.org/cancer/neuroblastoma/detection-diagnosis-staging/survival-rates.html>

Neuroblastoma *In Vivo* Assessment

Based on the initial 22 day data of a recent study we conducted in a xenograft mouse model of neuroblastoma, SACT-1 was orally administered daily at 60mg/kg in combination of SOC chemotherapy brought a statistically significant tumor shrinkage (unpaired student's t-test, $p < 0.01$) from Day 15 to Day 22, compared to the control group which received SOC only. Indeed, the combination reduced the tumor size by up to 54.2% in the first 22 days compared with the control (SOC only). SACT-1 appears to be effective in accelerating the effect of the SOC in early time points (from Day 1 - 7 vs control). This further supports our earlier *in vitro* observation that SACT-1 promotes tumor DNA damage and tumor cell death.



**Unpaired student's t-test, $p < 0.01$, $n = 8$ (based on initial 22 days period)

Other Cancer Types *In Vitro* Assessment

In addition, SACT-1 was also screened for *in vitro* activity in a panel of over 300 cancer cell lines. Similar to our previous findings against neuroblastoma cell lines, SACT-1 exhibits similar anti-tumor efficacy across one or more other major cancer types, including but not limited to colorectal cancer, leukemia and lymphoma cell lines. As a result, in addition to treating neuroblastoma, SACT-1 may have potential applications in the treatment of other cancers. Based on this discovery, the company plans to carry out further *in vivo* studies to study the efficacy of SACT-1 over other types of cancers to maximize the potential of SACT-1.

About SACT-1

As part of Aptorum Group's SMART-ACT[®] platform, SACT-1 was discovered from our SMART-ACT[®] platform focused on orphan and unmet diseases. SACT-1 is a repurposed drug targeted for the treatment of neuroblastoma (and potentially other cancer types) especially in combination with SOC chemotherapy. SACT-1's mechanism has been demonstrated *in vitro* to enhance DNA damage and tumor cell death.

About Aptorum Group Limited

Aptorum Group Limited (Nasdaq: APM, Euronext Paris: APM) is a pharmaceutical company dedicated to developing and commercializing novel therapeutics to tackle unmet medical needs. Aptorum Group is pursuing therapeutic projects in orphan diseases, infectious diseases, metabolic diseases, woman's health and other disease areas.

For more information about Aptorum Group, please visit www.aptorumgroup.com.

For further general presentation, please visit:

<https://ir.aptorumgroup.com/static-files/ca36cc65-6f23-4105-895e-f5f234ecca1e>

Disclaimer and Forward-Looking Statements

This press release does not constitute an offer to sell or a solicitation of offers to buy any securities of Aptorum Group.

This press release includes statements concerning Aptorum Group Limited and its future expectations, plans and prospects that constitute "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. For this purpose, any statements contained herein that are not statements of historical fact may be deemed to be forward-looking statements. In some cases, you can identify forward-looking statements by terms such as "may," "should," "expects," "plans," "anticipates," "could," "intends," "target," "projects," "contemplates," "believes," "estimates," "predicts," "potential," or "continue," or the negative of these terms or other similar expressions. Aptorum Group has based these forward-looking statements, which include statements regarding projected timelines for application submissions and trials, largely on its current expectations and projections about future events and trends that it believes may affect its business, financial condition and results of operations. These forward-looking statements speak only as of the date of this press release and are subject to a number of risks, uncertainties and assumptions including, without limitation, risks related to its announced management and organizational changes, the continued service and availability of key personnel, its ability to expand its product assortments by offering additional products for additional consumer segments, development results, the company's anticipated growth strategies, anticipated trends and challenges in its business, and its expectations regarding, and the stability of, its supply chain, and the risks more fully described in Aptorum Group's Form 20-F and other filings that Aptorum Group may make with the SEC in the future, as well as the prospectus that received the French Autorité des Marchés Financiers visa n°20-352 on 16 July 2020.

As a result, the projections included in such forward-looking statements are subject to change and actual results may differ materially from those described herein. Aptorum Group assumes no obligation to update any forward-looking statements contained in this press release as a result of new information, future events or otherwise.

This announcement is not a prospectus within the meaning of the Regulation (EU) n°2017/1129 of 14 June 2017 as amended by Regulations Delegated (EU) n°2019/980 of 14 March 2019 and n°2019/979 of 14 March 2019.

This press release is provided “as is” without any representation or warranty of any kind.

Investor relations

Aptorum Group limited
Investor Relations Department:
Tel: +44 020 80929299
Email: investor.relations@aptorumgroup.com

Redchip – Financial Communications United States
Investor relations
RedChip Companies, Inc.
dave@redchip.com
+1 407 491 4498

Actifin – Financial Communications Europe
Investor relations
Ghislaine Gasparetto
ggasparetto@actifin.fr
+33 1 56 88 11 22



Aptorum Group Announces Further Positive Data on ALS-4 against MRSA Wound Infection and MRSA Bacteraemia against Linezolid and Vancomycin Respectively in *In Vivo* Models

NEW YORK -- (BUSINESS WIRE) -- Aptorum Group Limited (NASDAQ: APM, Euronext Paris: APM) ("Aptorum Group"), a biopharmaceutical company focused on novel therapeutics including the development of next-generation approach therapeutics targeting antimicrobial resistance, announced two sets of positive data showing both significant *in vivo* activities of its lead compound ALS-4 against Methicillin-Resistant *Staphylococcus aureus* (MRSA, one of the "super-bugs") in wound infected and bacteraemia mouse models, respectively when compared to prevailing antibiotics.

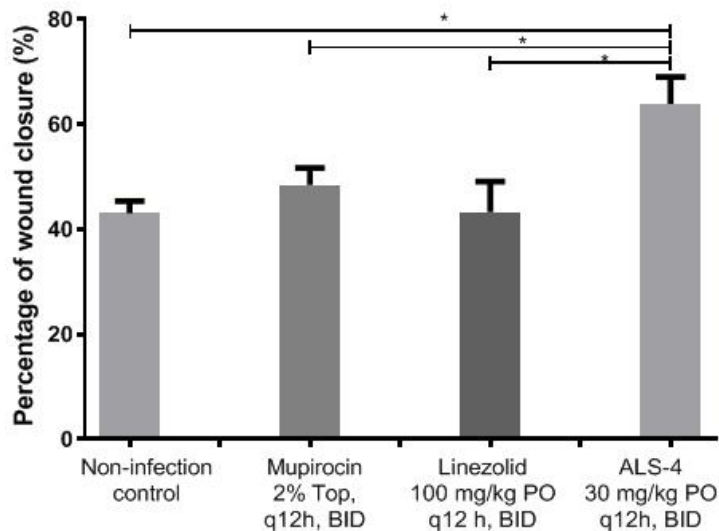
ALS-4 is currently undergoing final stages of IND enabling studies, which involves a 14-Day oral toxicity in rats and dogs, a functional observation battery study in rats and a cardiovascular telemetry and respiratory study in dogs. Subject to the final IND-enabling studies results, ALS-4 is on track to target the regulatory submission in Q4 2020 subject to which to commence Phase I clinical trials in Canada

"Despite the two current mainstay treatments, vancomycin and daptomycin, being the only FDA approved antibiotics for MRSA bacteraemia thus far, patient mortality, morbidity and recurrence rates remain significant¹. With the fragile antibiotic pipeline being at risk globally, antimicrobial resistance issues continue to gain significant attention from global bodies including the World Health Organization and the FDA, as well as the pharmaceutical industry. We believe that our oral ALS-4 drug based on a novel first-in-class anti-virulence concept can potentially tackle a variety of infections related to MRSA, including (but not limited to) bacteraemia and skin & soft tissue infections, subject to the respective clinical trials. We are greatly encouraged by the data because ALS-4 appears to be effective against MRSA superbug and could be a potential alternative and sustainable treatment for different MRSA indications including, but not limited to, MRSA bacteraemia and skin infections. ALS-4's anti-virulent properties are a novel approach in tackling antimicrobial resistance issues as encouraged by recent global action plans. We are also pleased to report that our IND enabling studies are also at their final stages and we remain on track to target regulatory submission to commence phase 1 clinical trials," said Mr. Darren Lui, President and Executive Director of the company.

¹ <https://link.springer.com/article/10.1186/s13054-017-1801-3>

Efficacy of ALS-4 in a MRSA Wound Infection Mouse Model

A recent study, conducted by a third party contract research organization, assessed ALS-4's effect in the healing of open wounds infected with MRSA in a mouse model. Compared with topical dosing of 2% Mupirocin and oral dosing of Linezolid at 100mg/kg twice a day, oral dosing of ALS-4 at 30mg/kg twice a day showed statistically significant improvement in wound healing. Specifically, at the end of the study on Day 7, ALS-4 exhibited 63.8% of wound closure compared with 48.4% for oral Linezolid and 43.2% for topical Mupirocin 2%. The results are further illustrated in the graph below.



*Unpaired student's t-test, $p < 0.05$

Efficacy of ALS-4 in a Bacteraemia Mouse Model

In a further round of *in vivo* studies, conducted by a third party contract research organization, in a non-lethal MRSA bacteraemia mouse model, the mice were orally administered with different doses of ALS-4 from 0.3 to 30mg/kg twice a day for 7 days, compared to those who received vancomycin only group (3mg/kg of vancomycin administered intravenously) and a no treatment control group.

At the conclusion of the study on Day 7, ALS-4 brought a statistically significant reduction in bacterial counts in major organs such as the kidneys, lungs, liver and spleen compared with the no drug control and vancomycin only groups (unpaired student's t-test, $p < 0.05$). This is in addition to the previous *in vivo* results announced in February 2020, whereby ALS-4 demonstrated on a statistically significant basis better survival rates (56% vs 0% control group) in the lethal MRSA bacteraemia rat model and higher reduction of bacterial load (by 99.5% against the control group) in the non-lethal MRSA bacteraemia rat model.

About ALS-4

As part of Aptorum Group's Acticle infectious disease platform, ALS-4 is a novel first-in-class small molecule developed in oral form based on an anti-virulence approach targeting Methicillin resistant *Staphylococcus aureus* (MRSA). ALS-4 targets the antimicrobial resistant properties of *S. aureus* and render the bacteria to become highly susceptible to the host's immune clearance and also potentially other existing antibiotics, as shown in the preclinical data.

About Aptorum Group Limited

Aptorum Group Limited (Nasdaq: APM, Euronext Paris: APM) is a pharmaceutical company dedicated to developing and commercializing novel therapeutics to tackle unmet medical needs. Aptorum Group is pursuing therapeutic projects in orphan diseases, infectious diseases, metabolic diseases, woman's health and other disease areas.

For more information about Aptorum Group, please visit www.aptorumgroup.com.

For further general presentation, please visit:

<https://ir.aptorumgroup.com/static-files/ca36cc65-6f23-4105-895e-f5f234ecca1e>

Disclaimer and Forward-Looking Statements

This press release does not constitute an offer to sell or a solicitation of offers to buy any securities of Aptorum Group.

This press release includes statements concerning Aptorum Group Limited and its future expectations, plans and prospects that constitute “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995. For this purpose, any statements contained herein that are not statements of historical fact may be deemed to be forward-looking statements. In some cases, you can identify forward-looking statements by terms such as “may,” “should,” “expects,” “plans,” “anticipates,” “could,” “intends,” “target,” “projects,” “contemplates,” “believes,” “estimates,” “predicts,” “potential,” or “continue,” or the negative of these terms or other similar expressions. Aptorum Group has based these forward-looking statements, which include statements regarding projected timelines for application submissions and trials, largely on its current expectations and projections about future events and trends that it believes may affect its business, financial condition and results of operations. These forward-looking statements speak only as of the date of this press release and are subject to a number of risks, uncertainties and assumptions including, without limitation, risks related to its announced management and organizational changes, the continued service and availability of key personnel, its ability to expand its product assortments by offering additional products for additional consumer segments, development results, the company's anticipated growth strategies, anticipated trends and challenges in its business, and its expectations regarding, and the stability of, its supply chain, and the risks more fully described in Aptorum Group's Form 20-F and other filings that Aptorum Group may make with the SEC in the future, as well as the prospectus that received the French Autorité des Marchés Financiers visa n°20-352 on 16 July 2020.

As a result, the projections included in such forward-looking statements are subject to change and actual results may differ materially from those described herein. Aptorum Group assumes no obligation to update any forward-looking statements contained in this press release as a result of new information, future events or otherwise.

This announcement is not a prospectus within the meaning of the Regulation (EU) n°2017/1129 of 14 June 2017 as amended by Regulations Delegated (EU) n°2019/980 of 14 March 2019 and n°2019/979 of 14 March 2019.

This press release is provided “as is” without any representation or warranty of any kind.

Investor relations

Aptorum Group limited
Investor Relations Department:
Tel: +44 020 80929299
Email: investor.relations@aptorumgroup.com

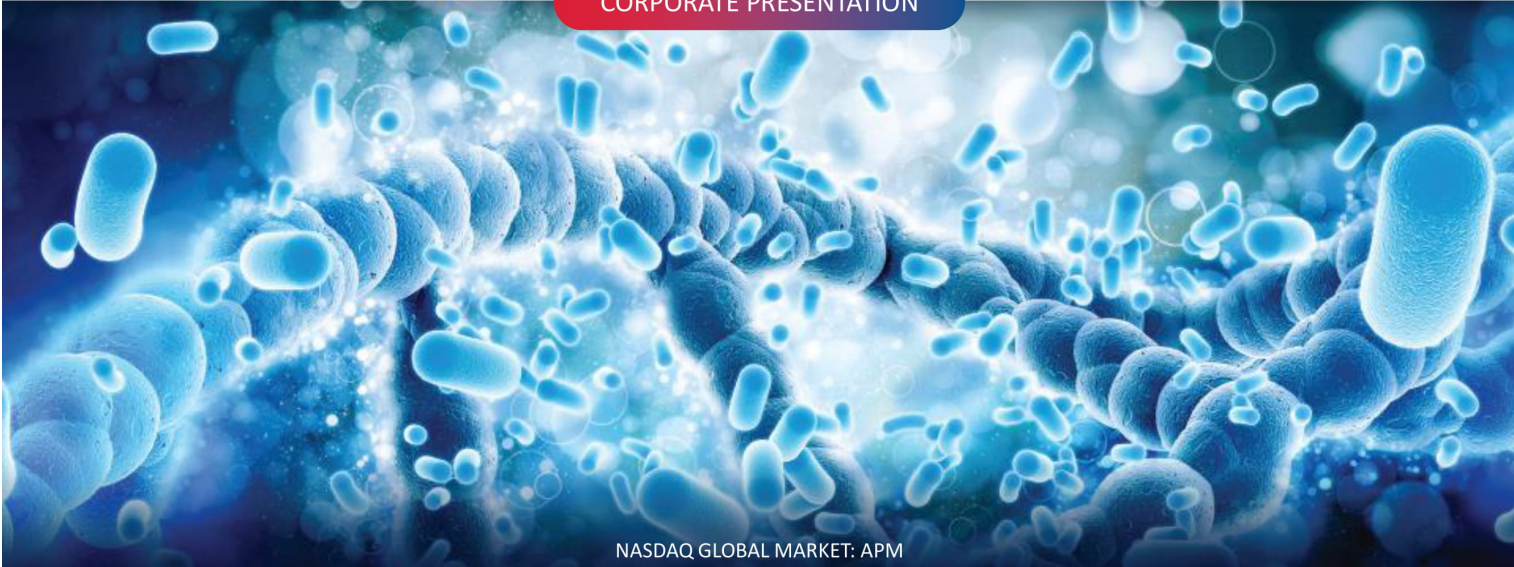
Redchip – Financial Communications United States
Investor relations
Dave Gentry
dave@redchip.com
+1 407 491 4498

Actifin – Financial Communications Europe
Investor relations
Ghislaine Gasparetto
ggasparetto@actifin.fr
+33 1 56 88 11 22



Facilitating Life Science Innovations to Serve Unmet Medical Needs

CORPORATE PRESENTATION



NASDAQ GLOBAL MARKET: APM



Disclaimer

This document includes statements concerning Aptorum Group Limited and its future expectations, plans and prospects that constitute “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995. For this purpose, any statements contained herein that are not statements of historical fact may be deemed to be forward-looking statements. In some cases, you can identify forward-looking statements by terms such as “may,” “should,” “expects,” “plans,” “anticipates,” “could,” “intends,” “target,” “projects,” “contemplates,” “believes,” “estimates,” “predicts,” “potential,” or “continue,” or the negative of these terms or other similar expressions. Aptorum Group has based these forward-looking statements, which include statements regarding projected timelines for application submissions, trials and commercialization and market potential of related products, largely on its current expectations and projections about future events and trends that it believes may affect its business, financial condition and results of operations. These forward-looking statements speak only as of the date of this document and are subject to a number of risks, uncertainties and assumptions including, without limitation, risks related to its announced management and organizational changes, the continued service and availability of key personnel, its ability to expand its product assortments by offering additional products for additional consumer segments, development results, the company’s anticipated growth strategies, anticipated trends and challenges in its business, and its expectations regarding, and the stability of, its supply chain, and the risks more fully described in Aptorum Group’s Form 20-F and other filings that Aptorum Group may make with the SEC in the future. As a result, the projections included in such forward-looking statements are subject to change. Aptorum Group assumes no obligation to update any forward-looking statements contained in this document as a result of new information, future events or otherwise.

About Aptorum Group

Company information

- Established in 2010, focused on current unmet medical needs, including orphan diseases, infectious diseases, metabolic diseases and women's health, over 15 therapeutic candidates
- **Business Strategy:** From Discovery to Ph2 Proof-of-Concept (PoC)
- **Markets and Regulatory:** Targeted for US FDA clinical, China NMPA and Europe EMA approval and other major countries
- **IPO:** Listed on NASDAQ Global Market (ticker symbol: APM) on December 18, 2018 and cross-listed on Euronext Paris (ticker symbol: APM) on July 24, 2020
- Company's principal office based in London, United Kingdom
- Core development site based in Toronto (GLP, GMP, clinical trial coordination)
- ~40 full time staff and ~45 scientists, advisors and consultants with vast experience in drug development and clinical studies

Directors, Management and Significant Employees

Leadership



MR. IAN HUEN

Founder, Chief Executive Officer and Executive Director

- Over 15 years in global asset management;
- US healthcare equity research analyst at Janus Henderson Group;
- Trustee board member of Dr. Stanley Ho Medical Development Foundation;
- CFA, Princeton University, U.S. (Econ)



MR. DARREN LUI

President and Executive Director

- Over 13 years in global capital market;
- Extensive experience in Investment in UK, Singapore, US, etc.;
- ICAS, CFA & Associate of Chartered Institute of Securities & Investments (UK);
- First-Class Honors from Imperial College (Biochemistry)



DR. CLARK CHENG

Chief Medical Officer and Executive Director

- Almost 10 years working in Raffles Medical Group as Operations Director and Deputy General Manager;
- Received medical training at the University College London in 2005 & obtained membership of the Royal College of Surgeons of Edinburgh in 2009;
- MBA, University of Iowa, U.S.



MISS SABRINA KHAN

Chief Financial Officer

- Almost 10 years serving US & Asian healthcare companies;
- Extensive experience in business development, restructuring, US & Asian IPO, and M&A deals;
- Solid accounting experience gained from Big 4;



DR. THOMAS LEE WAI YIP

Head of Research and Development

- Former Assistant Professor at The Chinese University of Hong Kong (CUHK) specialized in drug delivery and formulation development;
- 10 years from Novartis & Celgene;
- B.Pharm.(Hons), CUHK; Ph.D. in Pharmaceutical Sciences (Drug Delivery), the University of Wisconsin-Madison



DR. HERMAN WEISS

CEO of Claves Life Sciences Senior Medical Advisor of Aptorum Group

- Over 20 years of experience in medical field;
- Chairman of the Board of Directors of Todos Medical;
- Former Head of Clinical Development and Medical Affairs at Juniper Pharmaceuticals;
- MBA, George Washington University; M.D., Ohio State University



DR. ANGEL NG SIU YAN

Chief Operating Officer

- Research Officer cum Project Manager at The University of Hong Kong (HKU) towards cadaveric trial for a novel soft robotics medical device;
- Former Project Manager at Hong Kong Science & Technology Parks Corporation and CUHK;
- B.Sc (Hons), HKU; M.Sc in Composite Materials, Imperial College London; Ph.D. in Mechanical Engineering, HKU

Independent Non-Executive Directors



PROFESSOR DOUGLAS ARNER

Kerry Holdings Professor in Law, HKU



DR. JUSTIN WU

COO of CUHK Medical Centre



DR. MIRKO SCHERER

CEO of CoFeS China and Ex Head of TVM Asia



MR. CHARLES BATHURST

Founder of Summerhill Advisors Limited

Aptorum Team

Consultants and Advisors to Aptorum Group and Subsidiaries



DR. KEITH CHAN
Consultant

- Adjunct professor and advisor at the Research Center for Drug Discovery, National Yang Ming University in Taipei;
- Former Division Director of Office of Generic Drugs, US FDA;
- Co-founder of Globomax LLC;
- Formerly employed at Ciba-Geigy



DR. NISHANT AGRAWAL
Senior Clinical Advisor

- Professor of Surgery, School of Medicine, University of Chicago;
- Former Asso. Professor at Johns Hopkins University;
- M.D., Johns Hopkins University School of Medicine



DR. LAWRENCE BAUM
Senior Scientific Advisor

- Asso. Professor, School of Pharmacy, The Chinese University of Hong Kong;
- Research Officer, Faculty of Medicine, The University of Hong Kong;
- Ph.D. in Neurosciences, UC San Diego



DR. FRANCIS SZELE
Senior Scientific Advisor

- Asso. Professor, Department of Physiology, Anatomy & Genetics, University of Oxford;
- Asst. Professor, Subventricular Zone, Northwestern University;
- Ph.D. in Biology, The University of Pennsylvania, U.S.



MR. WILLIAM WEISS
Consultant

- Currently Director of Preclinical Service and Instructor of Pharmaceutical Sciences, College of Pharmacy, University of North Texas;
- 38 years of experience in drug discovery and development of antimicrobials including antibiotics, antivirals and antifungals;
- Former Director of Cumbre Pharmaceuticals Inc;
- Former Group Leader at Wyeth for 17 years;
- Formerly employed at Schering-Plough for 7 years;
- BSc in Microbiology from Rutgers University; MSc in Microbiology from Penn State University and Fairleigh Dickinson University



DR. KIRA SHEINERMAN
Senior Strategic Consultant

- Co-Founder, CEO and Executive Director of DiamiR Biosciences;
- Serves as a Managing Director, Healthcare Investment Banking at H.C. Wainwright & Co.;
- Ph.D. in Biomedical Sciences from Mount Sinai School of Medicine in New York;
- Honors MBA from Zicklin School of Business, Baruch College, City University of New York



DR. ROBBIE MAJZNER
Advisor

- Assistant professor of Pediatrics (Hematology/Oncology) at the Stanford University Medical Center;
- Completed residency training in pediatrics and fellowship training in pediatric hematology-oncology;
- Board certified in pediatrics and pediatric hematology-oncology;
- M.D., Harvard Medical School

Current progress of leading pipeline programs and discovery

→ Lead Projects → Other Candidates → Non-therapeutics Candidates

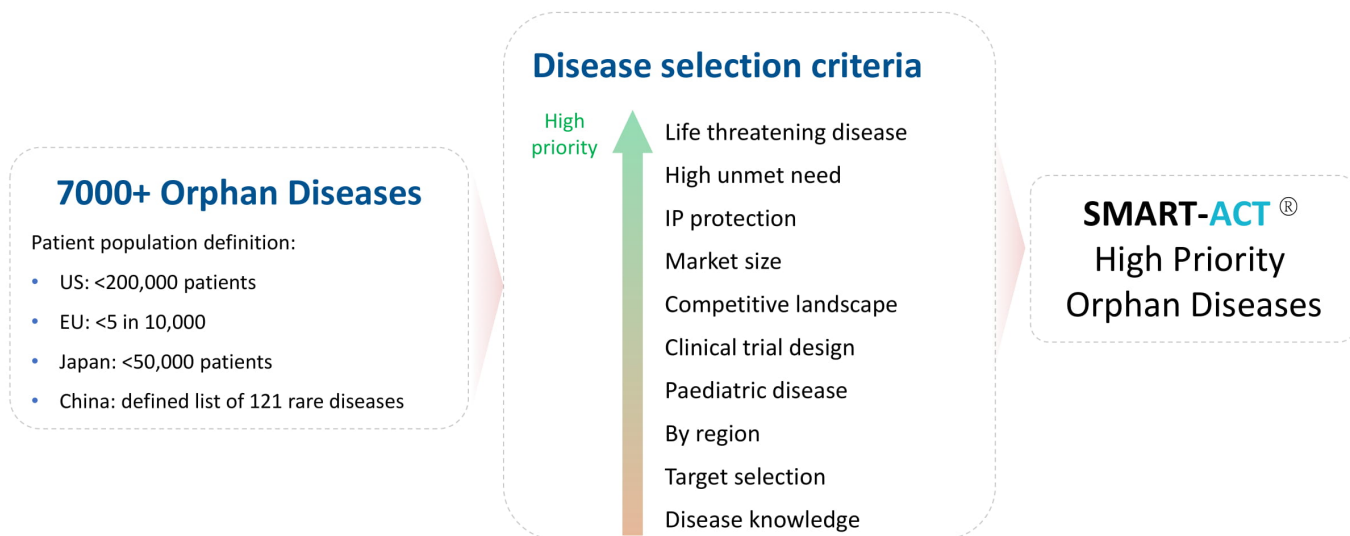
| Projects | Candidate / Modality | Indication | Computational Discovery | In Vitro Validation | Existing PhI/II Clinical Safety Data ¹ | In Vivo Validation | IND Preparation & Submission | PhI/II w/ Limited Population ² | |
|----------------------|--------------------------|-------------------------------------|-------------------------|---------------------|---|--------------------|------------------------------|---|--|
| SACT's Series | | | | | | | | | |
| SACT-1 | Repurposed Drug Molecule | Neuroblastoma | → | | | | | | |
| SACT-2 | Repurposed Drug Molecule | To be disclosed | → | | | | | | |
| SACT-3 | Repurposed Drug Molecule | To be disclosed | → | | | | | | |
| SACT-COV19 | Repurposed Drug Molecule | Coronavirus Disease 2019 (COVID-19) | → | | | | | | |

| Projects | Candidate / Modality | Indication | Development Stage | | | | | NDA | | | |
|--------------------------|----------------------|--|-----------------------------------|----------------|-------------------|--------------|---------|---------|---------|--|--|
| | | | Target Identification & Selection | Lead Discovery | Lead Optimization | IND-Enabling | Phase 1 | Phase 2 | Phase 3 | | |
| Acticule's Series | | | | | | | | | | | |
| ALS-4 | Small molecule | Treatment of bacterial infections caused by Staphylococcus aureus including MRSA | → | | | | | | | | |
| ALS-1 | Small molecule | Treatment of viral infections caused by influenza virus A | → | | | | | | | | |
| ALS-2 | Small molecule | Treatment of bacterial infections caused by Staphylococcus aureus including MRSA | → | | | | | | | | |
| ALS-3 | Small molecule | Reviving existing antibiotics to overcome drug resistance | → | | | | | | | | |
| Claves' Series | | | | | | | | | | | |
| CLS-1 | Macromolecule | Treatment of Obesity | → | | | | | | | | |
| CLS-2 | To be disclosed | To be disclosed | → | | | | | | | | |
| CLS-3 | To be disclosed | To be disclosed | → | | | | | | | | |

1. Refers to the drug's existing Phase I/II safety data previously conducted by a third party. Does not refer to clinical trials conducted by Aptorum 2. Subject to FDA's approval

Current progress of leading pipeline programs and discovery

| Projects | Candidate / Modality | Indication | Development Stage | | | | | | |
|---|--|--|-----------------------------------|----------------|--------------------------|------------------------------------|------------------------|--------------------------|---------|
| | | | Target Identification & Selection | Lead Discovery | Lead Optimization | IND-Enabling | Phase 1 | Phase 2 | Phase 3 |
| Nativus' Series | | | | | | | | | |
| NLS-1 | Small molecule | Treatment of Endometriosis | | | | | | | |
| Scipio's Series | | | | | | | | | |
| SPLS-1 | 83b-1 Novel Quinoline Derivative | Treatment of Liver Cancer | | | | | | | |
| Videns' Series | | | | | | | | | |
| VLS-2 | MITA | Treatment of Alzheimer's & Parkinson's Disease | | | | | | | |
| VLS-4 | Imaging Agent for MRI Diagnosis | Diagnosis of Alzheimer's Disease | | | | | | | |
| Projects | Modality | Target Customer | Formulation | | | Commercialization | | | |
| NativusWell [®] DOI (NLS-2) | Supplement | Women undergoing menopause | | | | | | | |
| Projects | Candidate / Modality | Indication | Development Stage | | | | | | |
| | | | Lab-based Phantom Trial | Animal Trial | IDE Application Approval | Safety/ Feasibility Clinical Study | Pivotal Clinical Study | Process of Obtaining PMA | |
| Signate's Series | | | | | | | | | |
| SLS-1 | Robotic Catheter Platform for Intra-Operative MRI-Guided Cardiac Catheterization | Heart Rhythm Disorders by Cardiac Electrophysiology Intervention | | | | | | | |

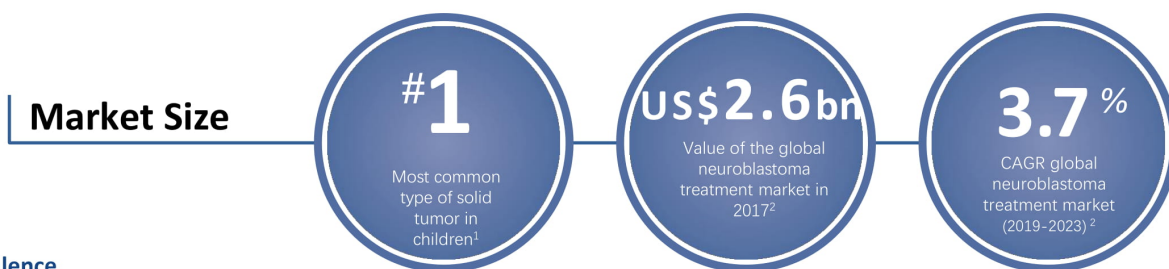


SMART-ACT[®] : Pipeline Workflow



SACT-1 (neuroblastoma): market overview

SACT-1 targets neuroblastoma, a cancer that develops from nerve cells



Prevalence

- ~700 cases of high risk neuroblastoma (NB) patients each year in the US³ and we estimated EU has 1.5x those cases, c. 1050 high risk NB patients per year.
- Accounts for ~15% of all cancer-related deaths in the pediatric population⁴

Orphan drug designation⁵

- Neuroblastoma is a rare disease and drugs are qualified for orphan designation by the FDA
- Designated orphan drugs receive 7 years of market exclusivity in US and 10 years of marketing exclusivity in EU
- Patents on reformulation, if granted, will provide up to 20 years of patent exclusivity from the application date in parallel to the market exclusivity

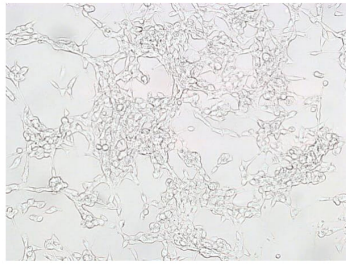
1. *Pediatr Rev.* 2018 Feb;39(2):57-67; 2. "Neuroblastoma Market Global Industry Perspective, Comprehensive Analysis, Size, Share, Growth, Trends, and Forecast 2019 – 2023"(2019). MRF Research. 3. *Curr Oncol Rep.* 2009 Nov;11(6):431-8 4. *Paediatr Drugs.* 2011 Aug 1;13(4):245-55 5. <https://www.fda.gov/about-fda/office-special-medical-programs/office-orphan-products-development>

All conclusory statements on this slide are based on Aptorum's internal tests/experimentation and has not yet been verified by clinical trials or third party testing.

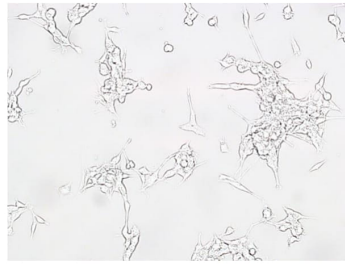
In vitro drug activity against neuroblastoma cell lines

- SACT-1's potential action against neuroblastoma might be patentable
- We find that its action against neuroblastoma could be patentable

Control treatment on neuroblastoma cells



SACT-1 treatment on neuroblastoma cells

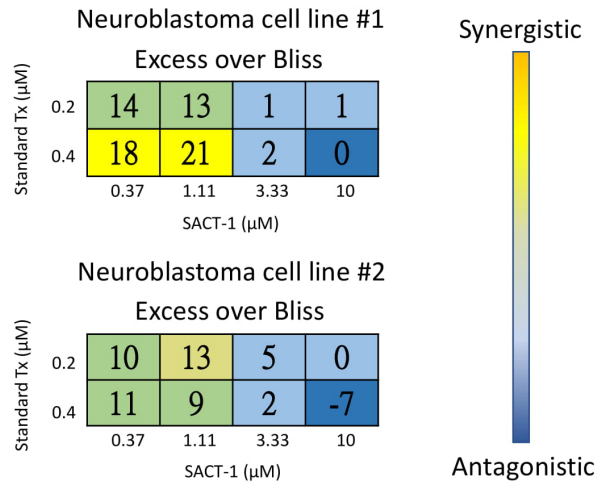
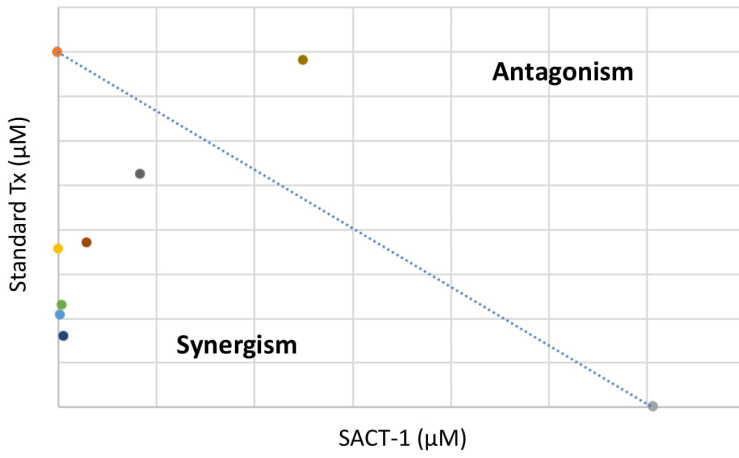


| | IC₅₀ [μM] For IMR-32 | IC₅₀ [μM] For SK-N-BE(2) | IC₅₀ [μM] For SK-N-SH | IC₅₀ [μM] For SH-SY5Y |
|---------------|--|--|---|---|
| SACT-1 | 2.97 | 3.37 | 2.75 | 3.12 |

The results shown in this slide are based on Aptorum's internal (in vitro/in vivo) tests/experiments that have not been verified in clinical trials and/or third party testing

Synergistic effect of SACT-1 in combination with standard treatment

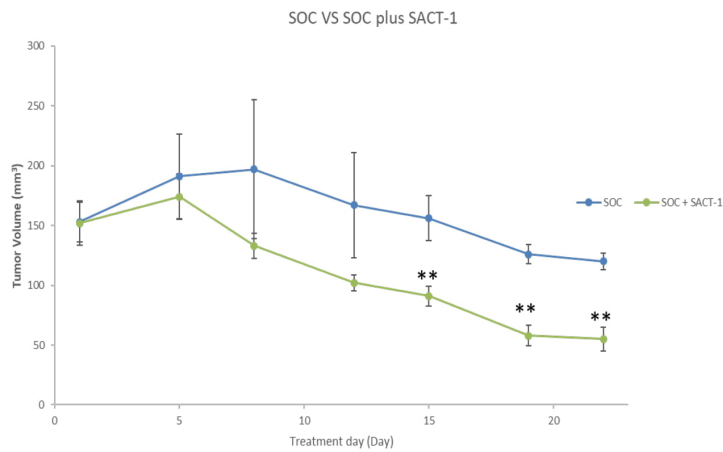
- Synergistic effect observed for SACT-1 in combination with standard treatment in 2 different neuroblastoma cell lines, as seen in the isobologram (left) and the Excess over Bliss (right)



The results shown in this slide are based on Aptorum's internal (in vitro/in vivo) tests/experiments that have not been verified in clinical trials and/or third party testing

SACT-1: Combination study with standard chemotherapy *in vivo* model

SACT-1 when combined with standard of care chemotherapy showed a statistically significant reduction in tumour volume in a xenograft mouse model.



** Unpaired Student's T-test, $p < 0.01$, $n = 8$ (based on data observed over initial 22 day period of the study, with SOC applied from day 1 to day 15 and SACT-1 applied from day 1 to day 21)

The results shown in this slide are based on Aptorum's internal (in vitro/in vivo) tests/experiments that have not been verified in clinical trials and/or third party testing

SACT-1: safety & tolerability

Well-established Safety profile based on a FDA approved product

- Did not show genotoxic potential even at the highest feasible concentration dose (*in vitro* and *in vivo*)
- In a phase IIb study over 2 years, all SACT-1 doses were safe and well tolerated
- No dose relationship between RPV and adverse events (AE)

| RPV | 25mg/day (N=93) | 75mg/day (N=95) | 150mg/day (N=91) |
|---|-----------------|-----------------|------------------|
| Median treatment duration, weeks | 101 | 100 | 100 |
| Adverse events (AE) | | | |
| Any grade 2-4 AE at least possibly related to RPV | 20% | 20% | 21% |
| AEs leading to discontinuation | 9% | 12% | 14% |
| Any serious AE | 13% | 14% | 10% |
| Deaths | 0% | 2% | 0% |

FDA approved pharmacokinetics profile

- Data package can be potentially accepted by the FDA in our 505(b)(2) new drug application
- Relatively long half-life ($t_{1/2} = 43-55h$). Frequent dosing may not be required

Ref: doi: 10.1089/AID.2011.0050

Executive summary: Acticule projects

ALS-4

- Aptorum's lead program ALS-4 is an anti-virulent, non-bactericidal drug candidate for *Staphylococcus aureus* infections including MRSA¹
- Unlike all major treatments on the market, ALS-4 is an orally administered anti-virulent molecule using a non-bactericidal approach¹, potentially reducing significant risks of developing *S. aureus* resistance
- Targeting IND submission by H2 2020
- Upon IND approval, a Phase I clinical study to commence in H2 2020 in North America
- Targeting to submit written request for approval under the newly established LPAD regulatory pathway (Limited Population Pathway for Antibacterial and Antifungal Drugs), to expedite marketing approval and commercialization

ALS-1

- A unique antiviral therapeutic against Influenza A that has a more upstream target than Tamiflu[®] which is shown to be more effective in vitro¹
- Viral resistance to Tamiflu and other neuraminidase inhibitors has risen rapidly in recent years²
- ALS-1 has a distinct mechanism of action compared with Tamiflu[®] and Xofluza^{TM1,3}

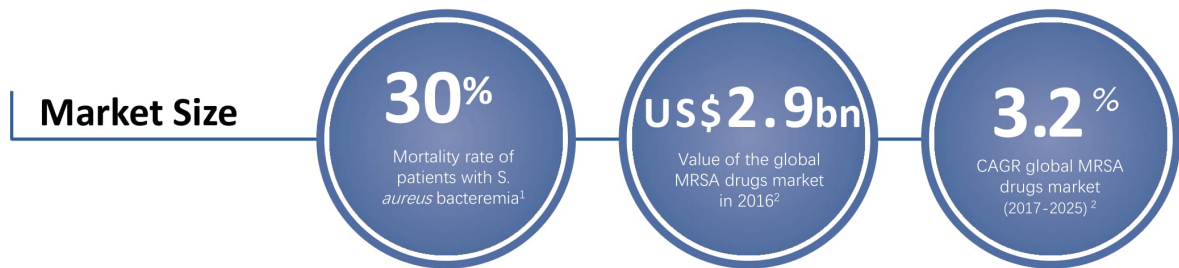
ALS-2/ALS-3

- Additional novel anti-virulent, non-bactericidal approach therapeutics targeting Gram-positive bacteria¹
- In discovery/lead optimization stage and generating good traction towards doing IND-enabling studies¹

1. Based on Aptorum's internal tests/experimentation and has not yet been verified by clinical trials or third party testing; 2. Influenza Antiviral Medications: Summary for Clinicians. CDC. <https://www.cdc.gov/flu/professionals/antivirals/summary-clinicians.htm>; 3. Nat Biotechnol. 2010 Jun;28(6):600-5

ALS-4: Market Overview

ALS-4 is an anti-virulent, non-bactericidal drug candidate for *Staphylococcus aureus* infections including MRSA



Third-party infectious disease drugs or company-related mergers and acquisitions

- In 2014, Merck's acquisition of Cubist Pharmaceuticals, a large developer of antibiotics, for USD 8.4bn³
- In 2018, Roivant's licensing of Intron's Phase II asset for USD 667.5m in upfront and milestone payments⁴

1. Clin Microbiol Rev. 2012 Apr;25(2):362-86; 2. "Methicillin-resistant Staphylococcus Aureus (MRSA) Drugs Market - Global Industry Analysis, Size, Share, Growth, Trends, and Forecast, 2017-2025" (2018). Transparency market research; 3. <https://dealbook.nytimes.com/2014/12/08/merck-agrees-to-acquire-drug-maker-cubist-for-9-5-billion/>; 4. <https://www.prnewswire.com/news-releases/roivant-sciences-and-intron-bio-sign-licensing-deal-for-novel-anti-superbugs-biologic-sal200-300753307.html>

Market Approved Drugs for MRSA Infections

Frequently prescribed antibiotics for MRSA infections¹

| Product (Company) | Antibiotic Class | Indication(s) | RoA | Dose | Cost of Treatment (duration) | Notes |
|-----------------------------------|------------------|-------------------------------------|------------|---------------|--|---|
| Vancomycin (Generic) | Glycopeptide | Severe infections caused by MRSA | IV / oral* | 2g/day | USD 101-144 (7-10 days) | <ul style="list-style-type: none"> • Currently, the most frequently prescribed antibiotic for MRSA suspected infections^{1,2} • In clinical use for >60 years³, vancomycin-resistant <i>S. aureus</i> (VRSA) was first discovered in 2002⁴ |
| Daptomycin (Merck) | Lipopeptide | ABSSSI, <i>S. aureus</i> bacteremia | IV | 4-6mg/kg/day | USD 6,736-23,710 ⁵ (14-42 days) | <ul style="list-style-type: none"> • In clinical use since 2003⁶ • Daptomycin resistance described in <i>S. aureus</i> as early as 2006⁷ |
| Linezolid (Pfizer) | Oxazolidinone | ABSSSI, CABP, HABP, uSSSI | IV / oral | 0.8-1.2g/day | IV: USD 1,920-5,376 Oral: USD 2,978-11,429 (10-14 days) | <ul style="list-style-type: none"> • In clinical use since 2003⁸. Entirely synthetic, not expected to develop clinical resistance⁹, however • Linezolid resistance encountered clinically since 2010⁹ |
| Ceftaroline fosamil (Actavis) | Cephalosporin | ABSSSI, CABP | IV | 1.2g/day | USD 1,831-5,127 (5-14 days) | <ul style="list-style-type: none"> • In clinical use since 2010¹⁰ • Ceftaroline resistance encountered clinically since 2016¹¹ |
| Tigecycline (Pfizer) | Glycycycline | ABSSSI, CABP, CIAI | IV | 0.1-0.2mg/day | USD 1,888-4,977 (5-14 days) | <ul style="list-style-type: none"> • In clinical use since 2005¹² • Tigecycline resistance encountered clinically in developing countries since 2017^{13,14} |
| Televancin (Theravance Biopharma) | Lipoglycopeptide | ABSSSI, HABP, VABP | IV | 10mg/kg/day | USD 3,002-10,568 (7-21 days) | <ul style="list-style-type: none"> • In clinical use since 2009¹⁵ • Vancomycin resistance leads to a 4-8x increase in televancin MIC (minimum inhibitory concentration)¹⁶ |

ABSSSI: acute bacterial skin and skin structure infection; CABP: community-acquired bacterial pneumonia; HABP: hospital-acquired bacterial pneumonia; CIAI: complicated intra-abdominal infection; VABP: ventilator-associated bacterial pneumonia; * Only for intestinal infections; 1. Reproduced from "Companies Take Aim at MRSA Infections" P T. 2016 Feb; 41(2): 126-128; 2. Clin Infect Dis. 2011 Feb 1;52(3):e18-55; 3. Clin Infect Dis. 2006 Jan 1;42 Suppl 1:55-12; 4. Centers for Disease Control and Prevention. https://www.cdc.gov/hai/settings/lab/vrsa_lab_search_containment.html; 5. Cost of treatment of Daptomycin for *S. aureus* bacteremia at a dosage of 6mg/kg; 6. FDA. https://www.accessdata.fda.gov/drugsatfda_docs/nda/2003/21-572_Cubicin.cfm; 7. Int J Antimicrob Agents. 2006 Oct;28(4):280-7; 8. FDA. https://www.accessdata.fda.gov/drugsatfda_docs/nda/2002/21-130s003_21131s003_21132s003_ZyvoxTOC.cfm; 9. Pharmaceuticals (Basel). 2010 Jul; 3(7): 1988-2006; 10. FDA. https://www.accessdata.fda.gov/drugsatfda_docs/nda/2010/200327orig1s000toc.cfm; 11. J Antimicrob Chemother. 2016 Jun; 71(6): 1736-1738; 12. FDA. https://www.accessdata.fda.gov/drugsatfda_docs/nda/2005/21-821_Tygacil.cfm; 13. New Microbes New Infect. 2017 Sep; 19: 8-12; 14. Journal of Microbiology and Infectious Diseases 2017; 7 (4):173-177; 15.FDA. https://www.accessdata.fda.gov/drugsatfda_docs/nda/2009/022110s000TOC.cfm; 16. Clin Infect Dis. 2015 Sep 15;61 Suppl 2:S58-68.

ALS-4: Addressing the Shortfall of Vancomycin

Vancomycin

- Generic antibiotic that is the most frequently prescribed for MRSA-suspected infections^{1,2}
- After >60 years³ of clinical use, its use against *S. aureus* is becoming limited. Vancomycin has been shown to have slow bactericidal activity, poor anti-staphylococcal activity, poor tissue penetration, and high rates of infection relapse^{4,5,6,7,8,9}
- The shortcomings of Vancomycin has been compounded since the discovery of vancomycin-resistant *S. aureus* (VRSA) in 2002¹⁰
- Vancomycin is not orally bioavailable and must be administered intravenously in order to treat systemic infections^{11,12}. Oral vancomycin is only effective for treating local intestinal infections¹³. Therefore, for MRSA-suspected infections oral vancomycin is only indicated for the treatment of pseudomembranous colitis¹⁴

ALS-4: Stand Alone or as Combination Therapy with Antibiotics (e.g. Vancomycin)

- As a combination therapy believed to overcome the shortcomings of vancomycin¹⁵
- ALS-4 can potentially complement other bactericidal antibiotics as well, therefore ALS-4 is not a direct competitor of antibiotics
- Synergistic effects of other drugs with vancomycin against MRSA has been demonstrated previously with β -lactam antibiotics and vancomycin¹⁶

1st place, Innovation Academy Category, ICPIC 2017



- Awarded to the Company's Hong Kong team, led by Dr. Richard KAO
- For the revolutionary concept of applying chemical genetics to tackle MRSA infection, which forms the scientific basis of ALS-2, ALS-3 and ALS-4

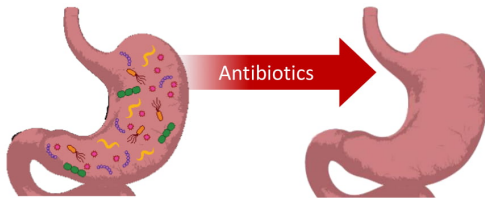
1. "Companies Take Aim at MRSA Infections" P T. 2016 Feb; 41(2): 126-128; 2. Clin Infect Dis. 2011 Feb 1; 52(3): e18-55; 3. Clin Infect Dis. 2006 Jan 1; 42 Suppl 1: S5-12; 4. Antimicrob Agents Chemother. 2008 Jan; 52(1): 192-7; 5. Clin Infect Dis. 2007 Jan 15; 44(2): 190-6; 6. Clin Infect Dis. 2007 Sep 1; 45(5): 601-8; 7. J Clin Microbiol. 2011 Oct; 49(10): 3669-72; 8. Clin Infect Dis. 2007 Sep 15; 45 Suppl 3: S191-5; 9. J Clin Microbiol. 2004 Jun; 42(6): 2398-402; 10. Centers for Disease Control and Prevention. https://www.cdc.gov/ha/settings/lab/vrsa_lab_search_containment.html; 11. J Infect. 2018 Dec; 77(6): 489-495; 12. StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2019-2018 Nov 18; 13. HealthJade. <https://healthjade.net/vancomycin/>; 14. Medscape. <https://reference.medscape.com/drug/firvanq-vancocin-vancomycin-342573>; 15. Combination Antibiotic Treatment of Serious Methicillin-Resistant Staphylococcus aureus Infections. <https://www.thieme-connect.com/products/ejournals/pdf/10.1055/s-0034-1396906.pdf>; 16. J Clin Microbiol. 2016 Mar; 54(3): 565-568

ALS-4: Value Proposition

Antibiotic

- Antibiotic resistance in *S. aureus* has been discovered in most prescribed antibiotics for MRSA¹
- Broad spectrum and indiscriminate²
- Commonly affect normal flora, may lead to superinfection in case of drug resistance³

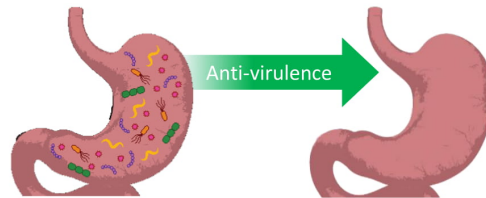
Indiscriminate clearance



Anti-virulence (ALS-4)

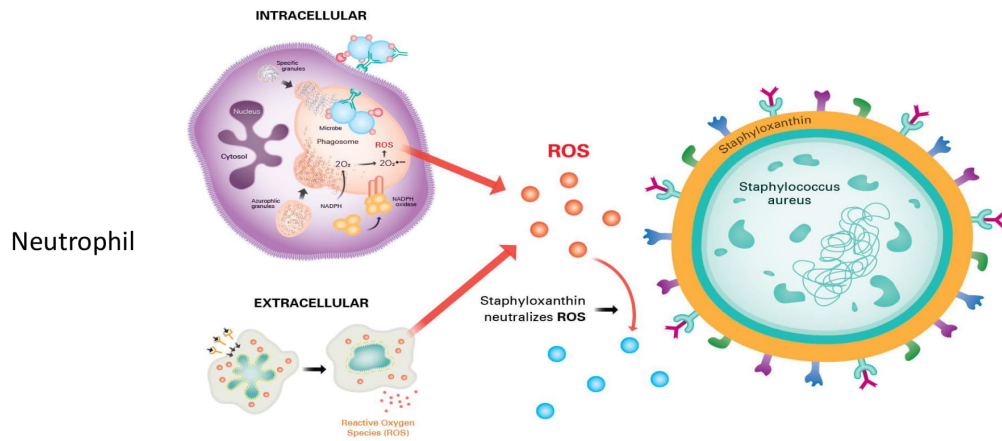
- ✓ Not bactericidal, potentially less selective pressure and much less likely for bacteria to develop resistance^{4,5}
- ✓ "Disarms" the bacteria by reducing pathogenicity^{4,5,6}
- ✓ Bacterial clearing is mediated by host immunity^{4,5}

Directed against pathogen



1. Refer to "ALS-4: Approved Drugs for MRSA Infections" for complete set of sources; 2. P T. 2016 Feb; 41(2): 126–128; 3. J Infect Dis. 2018 Jan 30;217(4):628-636; 4. Based on Aptorum's internal tests/experimentation and has not yet been verified by clinical trials or third party testing; 5. MBio. 2017 Sep 5;8(5). pii: e01224-17; 6. J Exp Med. 2005 Jul 18;202(2):209-15.

Mechanism of Action: Staphyloxanthin of Staphylococcus aureus

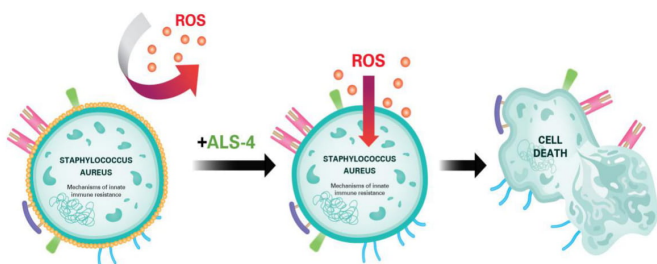


The above diagram summarizes the mechanism of action by Staphyloxanthin of *Staphylococcus aureus*:

- Neutrophils kill bacteria including *Staphylococcus aureus* intracellularly or extracellularly via Reactive Oxygen Species “ROS-oxygen radicals released by neutrophils trigger the subsequent bacterial damage processes”¹.
- To counteract, Staphyloxanthin protects the bacteria by serving as an anti-oxidant to neutralize the ROS secreted by neutrophils².

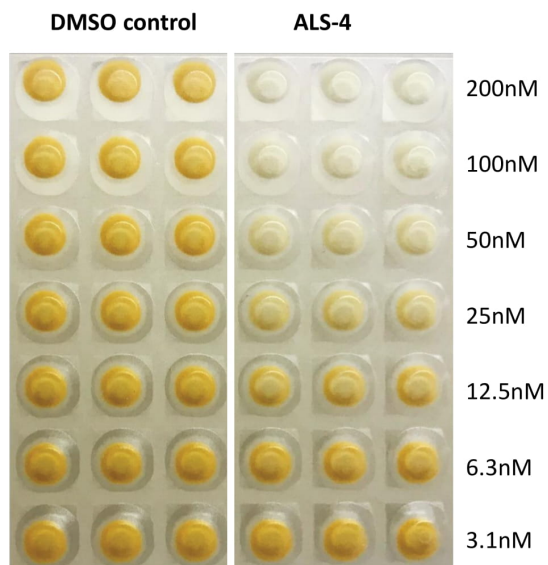
¹Annu Rev Immunol. 2005;23:197-223; ²mBio. 2017 Sep 5;8(5). pii: e01224-17

Mechanism of Action-ALS-4 on Staphyloxathin Synthesis



The above diagram summarizes our findings about how ALS-4 inhibits Staphyloxathin synthesis:

- ALS-4 inhibits a key enzyme in the biosynthesis of Staphyloxathin with an $IC_{50} = 20nM$.
- In the absence of Staphyloxathin, the bacteria become susceptible to damage by ROS, triggering the usual series of mechanisms by neutrophils that ultimately leads bacterial cell death.

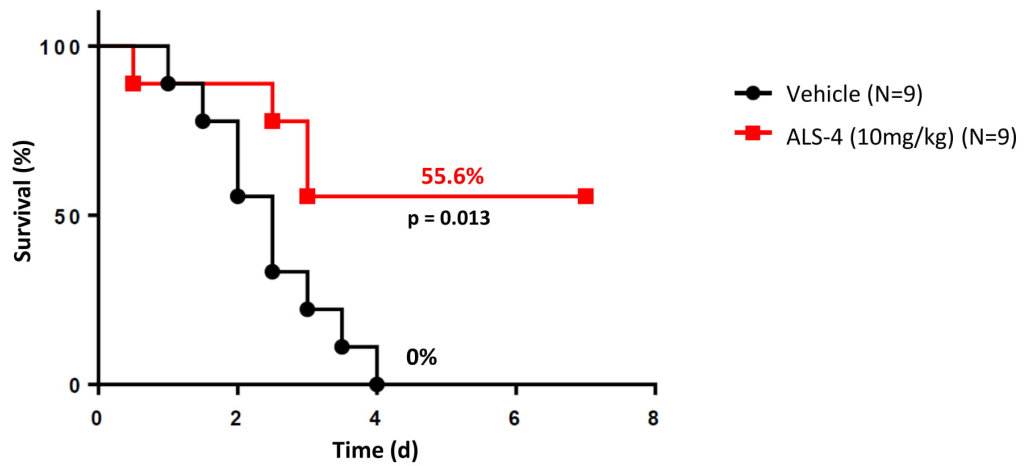


The description of ALS-4 and related conclusory statements on ALS-4 on this slide are based on Aptorum's internal tests/experimentation and has not yet been verified by clinical trials or third party testing.

ALS-4: oral formulation treatment in an MRSA survival study

The combination of ALS-4's anti-virulence properties together with host immune system, efficacy is still superior.

The below in-vivo data includes rats infected with a lethal dose of MRSA USA300 in a bacteremia model.

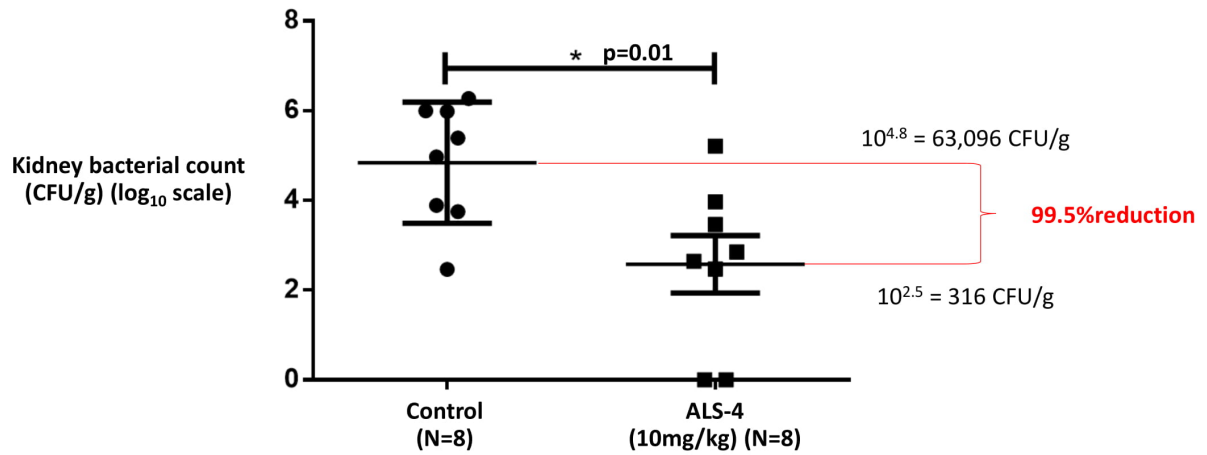


- A lethal dose (10^9 CFU) of MRSA was introduced through the tail vein
- ALS-4 was administered **orally** 30 minutes after infection for twice a day thereafter

The results shown in this slide are based on Aptorum's internal (in vitro/in vivo) tests/experiments that have not been verified in clinical trials and/or third party testing

ALS-4: oral formulation treatment in a non-lethal bacteremia model

ALS-4 is shown to greatly reduce organ bacterial count in a bacteremia animal model

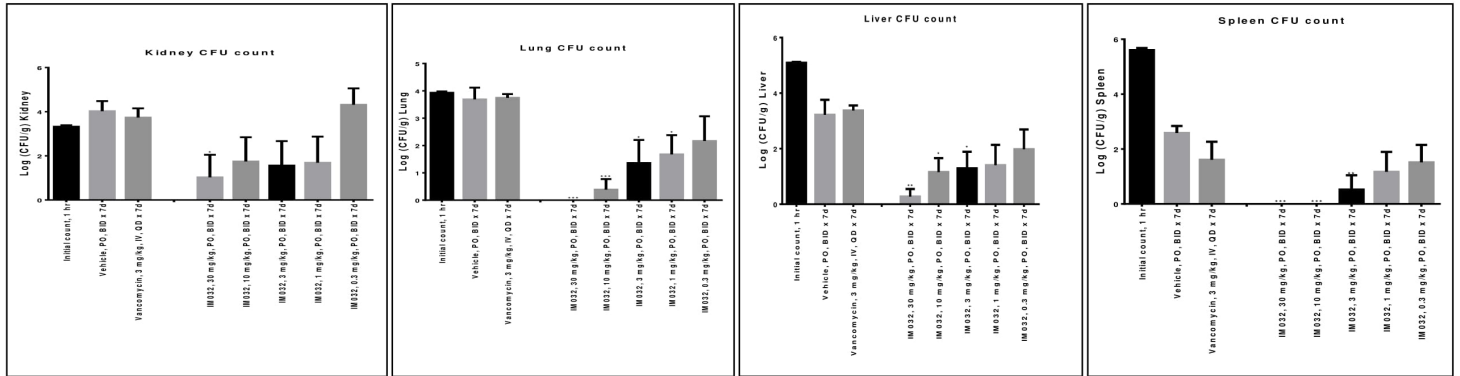


- Rats were challenged with a non-lethal dose (10^7 CFU) of MRSA through the tail vein
- In order to simulate a more realistic clinical scenario, treatment was introduced 14-days after infection, where ALS-4 was administered orally twice a day at 10mg/kg per animal

The results shown in this slide are based on Aptorum's internal (in vitro/in vivo) tests/experiments that have not been verified in clinical trials and/or third party testing

ALS-4: Oral administration in a MRSA non-lethal bacteraemia mouse model

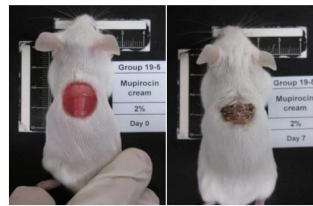
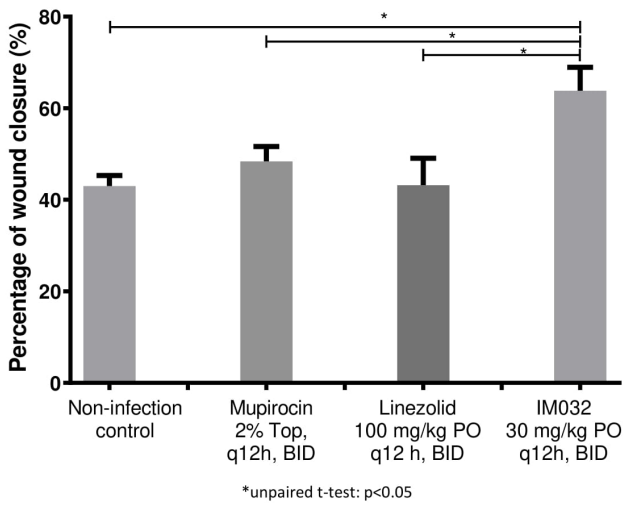
ALS-4 (Compound IM032) with increasing dose range shows a statistically significant reduction in bacteria count across major organs relative to vancomycin as a control.



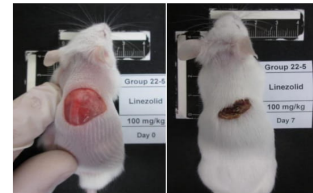
The results shown in this slide are based on Aptorum's internal (in vitro/in vivo) tests/experiments that have not been verified in clinical trials and/or third party testing

ALS-4: Oral administration in a MRSA mouse skin wound infection model

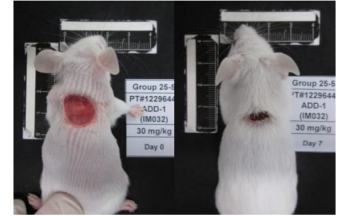
ALS-4 (Compound IM032) shows a statistically significant improvement in skin wound closure / healing.



2% Mupirocin Topical BID x 7 Days



Linezolid 100mg/kg PO BID x 7 Days



ALS-4 30mg/kg PO BID x 7 Days

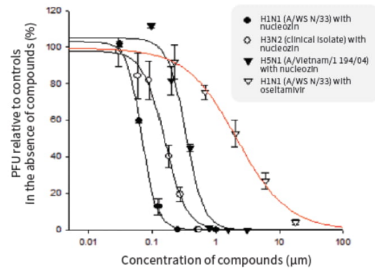
The results shown in this slide are based on Aptorum's internal (in vitro/in vivo) tests/experiments that have not been verified in clinical trials and/or third party testing

ALS-1: Targeting a Novel Druggable Target for Influenza A

ALS-1 inhibits influenza A nucleoprotein (NP)

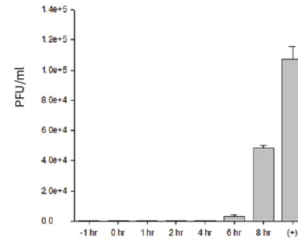
- NP is the most abundantly expressed protein during the course of an infection¹. Its primary function is to encapsidate the virus genome for RNA transcription, replication and packaging. It is also a key adapter molecule between virus and host processes¹
- ALS-1, by targeting NPs, acts upstream of Neuraminidase inhibitors such as Tamiflu, which target the last stage (budding) of the viral life cycle². This novel mechanism distinguishes ALS-1 from all other currently marketed antiviral drugs³

ALS-1 outperforms Tamiflu® (oseltamivir, in red) in vitro with a lower IC₅₀²



This figure shows the concentration dependence of ALS-1 in reducing the plaque-forming unit (pfu, a measure of number of infectious virus particulates) of human H1N1, H3N2 and H5N1 influenza viruses. The IC₅₀ for these viruses is between 0.1-1 μM

ALS-1 inhibited viral growth up to 6 hours after infection, indicating antiviral activities reside on post-entry and post-nuclear events²



This figure shows that MDCK cells were infected and ALS-1 (1 μM) was added before infection (-1 h), at the time of infection (0 h) and at 1, 2, 4, 6 and 8 hour after infection as indicated. (+) control without ALS-1

1. J Gen Virol. 2002 Apr;83(Pt 4):723-34; 2. Nat Biotechnol. 2010 Jun;28(6):600-5; 3. Refer to the next slide "ALS-1: A Unique Antiviral Therapeutic Against Influenza A".

Claves Executive Summary

Human Microbiota

- We live in constant symbiosis with our gut bacteria, and dysbiosis can be the cause to numerous diseases¹

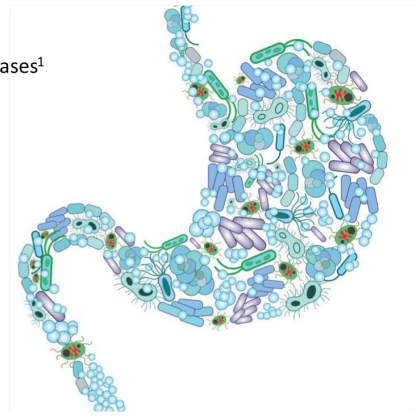
Claves Technology

- The Claves technology is designed to physically modulate the chemical signaling of diseases-causing microbiota²
- Highly scalable large molecule technology with over 70 potential therapeutic targets possible for development²
- Claves therapeutics bind target chemicals with high affinity and specificity, they are non-absorbable and expected to be free from any systemic toxicity^{2,3}
- Multiple candidates under development for various indications²

CLS-1: Lead Program Targeting Obesity

- CLS-1 is the lead program in the Claves projects, intended to target metabolites secreted by the microbiota linked to obesity²
- CLS-1 is also shown to modulate gut microbiota population linked to obesity^{2,3}
- CLS-1 achieves significant weight loss in a mouse model without affecting the gut mucosa, inflammation, and the functions of the liver and kidneys^{2,3}
- Non-absorbable nature of the Claves therapeutics may expedite traditional toxicological studies²

1. Lancet. 2003 Feb 8;361(9356):512-9; 2. Based on Aptorum's internal tests/experimentation and has not yet been verified by clinical trials or third party testing; 3. Data available in this presentation; 4. Current understanding of dysbiosis in disease in human and animal models. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4838534/>



- Contains **100s of species of microbes**
- Constantly producing **1000s of active metabolites**
- Some metabolites provides immunological and metabolic benefits
- **Dysbiosis (microbial imbalance) is a significant factor in disease⁴**

Claves Platform and CLS-1: Value Proposition

CLS-1

- Identified specific microbiota metabolite linked to obesity
- Novel therapeutic that physically modulates microbiota metabolite
- Acts locally in the gut with high affinity and specificity
- Non-absorbable and is expected to be free from any systemic toxicity
- Significant weight loss in an animal study

Claves Platform

- Novel platform technology that can be customized to bind a wide variety of microbiota metabolites with high affinity and specificity
- Sustainable pipeline of drug candidates for treatment of multiple indications (see next page)

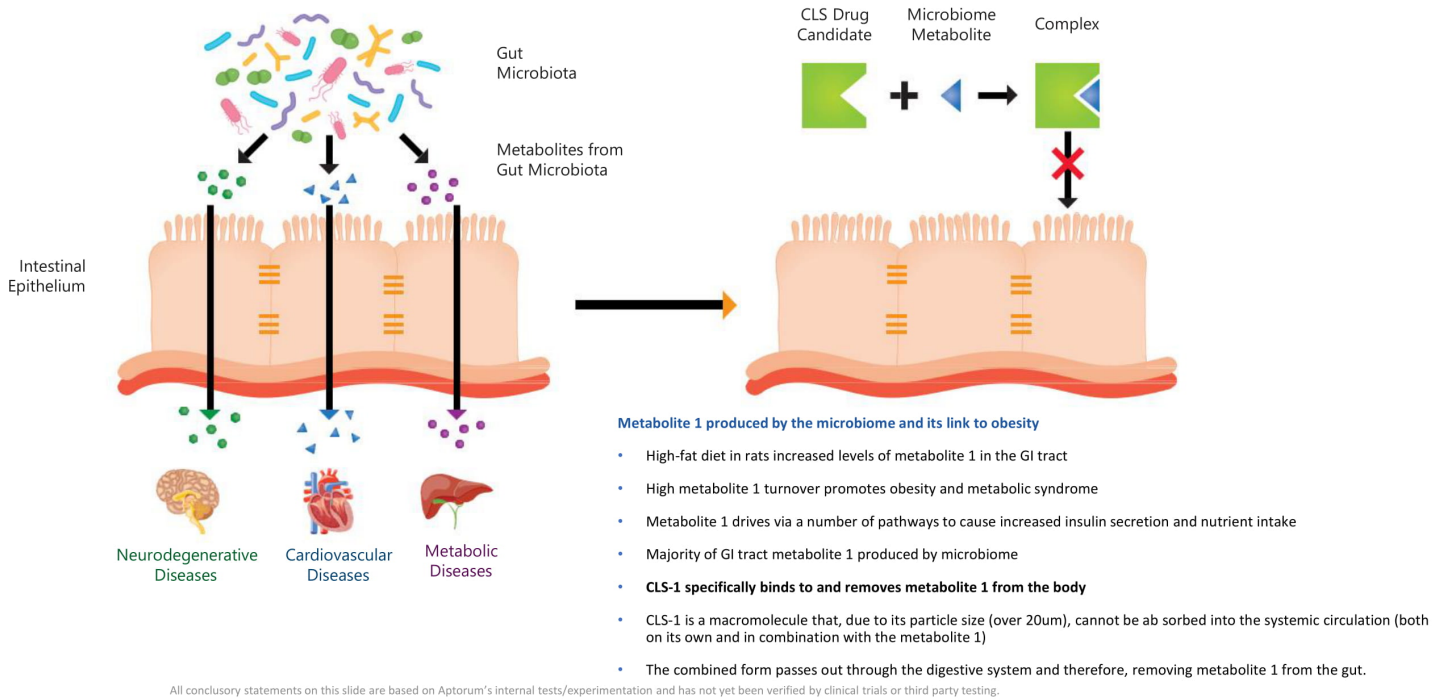


POSSIBLE INDICATIONS

| SYSTEMIC DISEASES | | DIGESTIVE DISEASES |
|-------------------------|----------------------------|----------------------------|
| Obesity | Renal failure | C. difficile infection |
| Diabetes | Depression | Colorectal cancer |
| Fatty liver | Parkinsonism | Inflammatory bowel disease |
| Cardiovascular diseases | Autistic spectrum disorder | Irritable bowel syndrome |

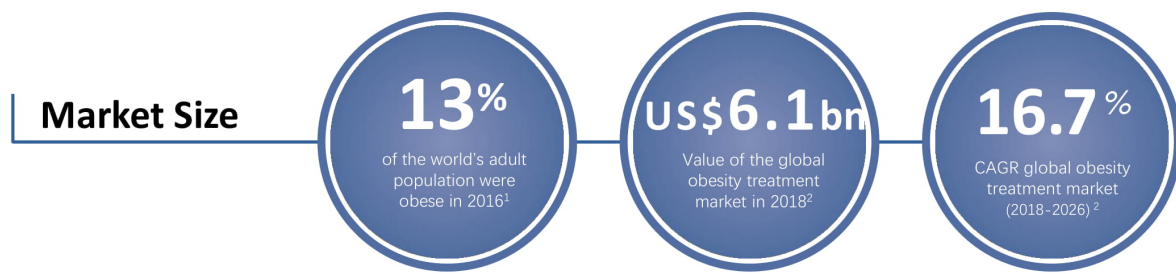
All conclusory statements on this slide are based on Aptorum's internal tests/experimentation and has not yet been verified by clinical trials or third party testing.

Mechanism of Action



CLS-1: Market Overview

CLS-1: the lead program in the Claves projects, targeting obesity



Recent Deals in Obesity Treatment

- Boehringer Ingelheim committed up to USD 300m to work with Gubra on obesity treatments

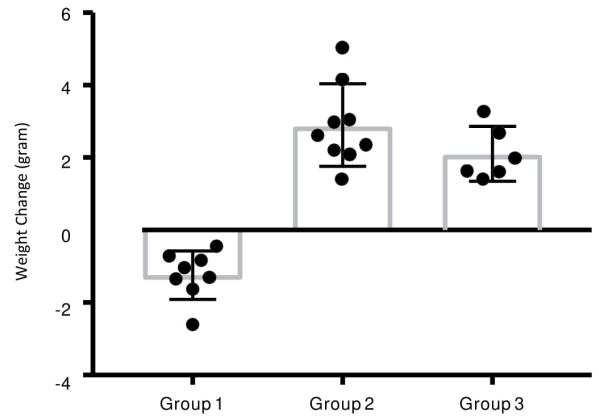
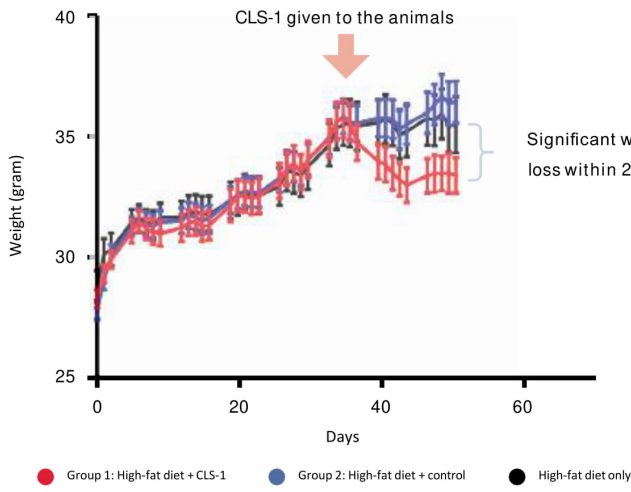
Competing Drugs

- CLS-1 is a drug candidate for obesity treatment that achieves its effect by modulating the chemical signaling of gut microbiota. There are no obesity treatment drugs on the market using similar mechanism³.

1. World Health Organization. Obesity and overweight fact sheet. <https://www.who.int/news-room/fact-sheets/detail/obesity-and-overweight>; 2. "Obesity Treatment Market To Reach USD 19.90 Billion By 2026" (2019). Reports And Data. <https://www.globenewswire.com/news-release/2019/06/06/1865530/0/en/Obesity-Treatment-Market-To-Reach-USD-19-90-Billion-By-2026-Reports-And-Data.html>; 3. To the extent of our knowledge at the time of writing

CLS-1: Efficacy in a Mouse Model

CLS-1 treatment significantly reduces body weight in mice



The above data are based on Aptorum's internal tests and has not yet been verified by clinical trials or third party testing.

NLS-2: Executive Summary

NLS-2¹

- NLS-2 is a dietary supplement for the relief of menopausal symptoms.
- The bioactive component of NLS-2 is DOI, a novel non-hormonal compound extracted from Chinese Yam
- DOI significantly increased estradiol biosynthesis and aromatase expression in granulosa cells *in vitro* and *in vivo* (rat animal model)
- Osteoporosis is frequently associated with menopause. DOI increases the apparent bone mineral density, bone volume fraction and trabecular thickness in an *in vivo* rat model
- DOI acts in a tissue-specific manner. Upregulation of aromatase, an enzyme involved in the production of estrogen, by DOI was found in ovary but not in other tissue
- DOI does not cause toxicity *in vitro* based on cell viability in the MTT assay
- Targeting to launch as a dietary supplement in H2 2020



Timeline²

→ Lead Projects → Other Candidates → Projected timeline

| Projects | Modality | Target Customer | Formulation | Commercialisation |
|---|------------|----------------------------|---|-------------------|
| NativusWell [®] DOI (NLS-2) | Supplement | Women undergoing menopause | Targeted to launch in HK, UK, Europe in 2020 (registration ongoing) | |

1. Lancet. 2003 Feb 8;361(9356):512-9; 2. Data available in this presentation

All conclusory statements on this slide are based on Aptorum's internal tests/experimentation and has not yet been verified by clinical trials or third party testing.



APPENDIX

Income Statement Summary (U.S. GAAP)¹

| | Six months ended June 30, 2020 | Six months ended June 30, 2019 | Year ended December 31, 2019 | Year ended December 31, 2018 |
|--|-----------------------------------|-----------------------------------|------------------------------------|------------------------------------|
| | US\$ (Unaudited) | US\$ (Unaudited) | US\$ | US\$ |
| Revenue | 327,273 | 239,792 | 535,166 | 383,450 |
| Research and development expenses | (4,315,033) | (2,714,217) | (6,939,051) | (3,101,432) |
| General and administrative fees | (2,076,634) | (3,232,916) | (7,373,425) | (4,919,626) |
| Legal and professional fees | (1,540,304) | (2,008,774) | (3,405,705) | (1,811,770) |
| Net loss attributable to Aptorum Group Limited | (6,204,565) | (9,088,471) | (18,686,762) | (14,831,723) |
| Net loss per share – basic and diluted | (0.21) | (0.31) | (0.64) | (0.53) |
| Interest expense, net ² | (144,226) | (3,678,566) | (3,699,672) | (4,458,191) |
| Depreciation and amortization | (702,633) | (585,701) | (1,299,618) | (682,902) |
| Share based compensation expenses | (584,094) | (593,806) | (1,612,832) | - |

Notes:

1. The following slide contains selected information for the Company's income statement. Please see the Company's filings made with the U.S. Securities and Exchange Commission for the Company's complete financial statements.

2. During the six months period ended June 30, 2019, and years ended December 31, 2019 and 2018, the net interest expenses included USD 3.1M, USD 3.1 M and USD 2.4 M, respectively, amortization of beneficial conversion feature which are non-cash items. No such amortization of beneficial conversion feature was incurred during the six months ended June 30, 2020.

Selected Balance Sheet Items (U.S. GAAP)¹

| | June 30, 2020 | December 31, 2019 | December 31, 2018 |
|---|--------------------|--------------------|---------------------|
| | US\$ | US\$ | US\$ |
| | (Unaudited) | | |
| Cash, restricted cash and marketable securities | 4,426,543 | 6,356,284 | 27,121,576 |
| Total current assets | 6,128,019 | 8,032,881 | 28,722,941 |
| Property, plant and equipment, net | 6,140,602 | 7,093,035 | 4,260,602 |
| Total assets | 23,309,075 | 23,954,218 | 45,074,640 |
| Convertible debts | - | - | (10,107,306) |
| Warrant liabilities | - | - | (753,118) |
| Total current liabilities | (3,080,408) | (2,674,675) | (12,184,865) |
| Total liabilities | (5,786,690) | (9,102,466) | (12,328,738) |
| Total equity attributable to the shareholders of Aptorum Group Limited | 19,837,917 | 16,361,208 | 33,114,435 |
| Working Capital^{2,3} | 3,137,611 | 5,358,206 | 16,538,076 |

1. The following slide contains selected information for the Company's balance sheets. Please see the Company's filings made with the U.S. Securities and Exchange Commission for the Company's complete financial statements.

2. Current assets less current liabilities.

3. As at 30 June 2020, Aptorum Group also has undrawn credit facility of c. USD13m available as additional working capital.



APTORUM GROUP LIMITED
investor.relations@aptorumgroup.com

T +44 020 80929299

F +44 020 39288277
