

To the shareholders of CRISPR Therapeutics AG

Invitation to the Annual General Shareholders' Meeting

Date: June 10, 2021, at 8:00 a.m. CEST

Place: Offices of Walder Wyss Ltd., Seefeldstrasse 123,
8008 Zurich, Switzerland

Important information: Due to the current spread of the SARS-CoV-2 virus (coronavirus) and the COVID-19 pandemic and in accordance with the COVID-19 Regime in Switzerland, shareholders will not be permitted to attend the 2021 Annual General Meeting in person. Shareholders must exercise their voting rights through the independent voting rights representative, as further described in the Company's proxy statement and the proxy card (accessible at <http://www.proxydocs.com/CRSP>).

Agenda Items and Proposals of the Board of Directors:

1. Approval of the annual report, the consolidated financial statements and the statutory financial statements of the Company for the year ended December 31, 2020.

The Board of Directors proposes to approve the annual report, the consolidated financial statements and the statutory financial statements of the Company for the year ended December 31, 2020 and to take note of the reports of the auditors. Copies of these documents are available for download at www.proxydocs.com/CRSP.

2. Approval of the appropriation of financial results.

The Board of Directors proposes to carry forward the net loss resulting from the appropriation of financial results as follows:

Proposed Appropriation of Net Income: in Swiss Francs (CHF)

Balance brought forward from previous years	CHF (256,578,970)
Net loss for the period (on a stand-alone unconsolidated basis):	CHF (398,304,620)
Total accumulated net loss:	CHF (654,883,590)

Resolution proposed by the Board of Directors:

- RESOLVED, that the net loss for the period of CHF (398,304,620) shall be carried forward.

3. Discharge of the members of the Board of Directors and Executive Committee.

The Board of Directors proposes that the members of the Board of Directors and the Executive Committee of the Company be discharged from personal liability for the business year ended December 31, 2020.

4. Election and re-election of the members to the Board of Directors.

The Board of Directors proposes that Rodger Novak, M.D. be re-elected as member of the Board of Directors and Chairman of the Board of Directors and that each of Samarth Kulkarni, Ph.D., Bradley Bolzon, Ph.D., Ali Behbahani, M.D., H Edward Fleming Jr., M.D., Simeon J. George, M.D., John T. Greene, Katherine A. High, M.D., and Douglas A. Treco, Ph.D. be elected or re-elected, as appropriate, as directors, each for a term extending until completion of the 2022 annual general meeting of shareholders.

4.a Re-election of Rodger Novak, M.D., as member and Chairman

4.b Re-election of Samarth Kulkarni, Ph.D.

4.c Re-election of Ali Behbahani, M.D.

4.d Re-election of Bradley Bolzon, Ph.D.

4.e Re-election of Simeon J. George, M.D.

4.f Re-election of John T. Greene

4.g Re-election of Katherine A. High, M.D.

4.h Re-election of Douglas A. Treco, Ph.D.

4.i Election of H. Edward Fleming Jr., M.D.

5. Re-election of the members of the Compensation Committee.

The Board of Directors proposes to re-elect each of Ali Behbahani, M.D., Simeon J. George, M.D., and John T. Greene as members of the Compensation Committee of the Board of Directors, each for a term extending until completion of the 2022 annual general meeting of the shareholders.

5.a Re-election of Ali Behbahani, M.D.

5.b Re-election of Simeon J. George, M.D.

5.c Re-election of John T. Greene

6. Approval of the compensation for the Board of Directors and the Executive Committee.

The Board of Directors proposes to hold the following separate votes on the non-performance-related and the variable compensation of the Board of Directors and the Executive Committee:

6.a Binding vote on total non-performance-related compensation for members of the Board of Directors from the 2021 Annual General Meeting to the 2022 annual general meeting of shareholders.

The Board of Directors proposes that shareholders approve the total maximum amount of non-performance-related compensation for the members of the Board of Directors covering the period from the 2021 Annual General Meeting to the 2022 annual general meeting of shareholders, i.e., USD \$507,000 (cash base compensation plus social security costs).

6.b Binding vote on equity for members of the Board of Directors from the

2021 Annual General Meeting to the 2022 annual general meeting of shareholders.

The Board of Directors proposes that shareholders approve the maximum grant of equity or equity linked instruments for the members of the Board of Directors covering the period from the 2021 Annual General Meeting to the 2022 annual general meeting of shareholders with maximum value of USD \$11,738,100 (equity grant date value plus social security costs).

6.c Binding vote on total non-performance-related compensation for members of the Executive Committee from July 1, 2021 to June 30, 2022.

The Board of Directors proposes that shareholders approve the total maximum amount of non-performance-related cash compensation for the members of the Executive Committee covering the period from July 1, 2021 to June 30, 2022, i.e., USD \$3,514,207 (cash base compensation plus social security costs).

6.d Binding vote on total variable compensation for members of the Executive Committee for the current year ending December 31, 2021.

The Board of Directors proposes that shareholders approve the total maximum amount of variable compensation for the members of the Executive Committee for the current year ending December 31, 2021, i.e., USD \$2,693,933 (cash compensation plus social security costs).

6.e Binding vote on equity for members of the Executive Committee from the 2021 Annual General Meeting to the 2022 annual general meeting of shareholders.

The Board of Directors proposes that shareholders approve the maximum of equity or equity linked instruments for the members of the Executive Committee covering the period from the 2021 Annual General Meeting of shareholders to the 2022 annual general meeting of shareholders with maximum value of USD \$55,827,593 (equity grant date value plus social security costs).

7. Approval of an increase in the Conditional Share Capital for Employee Equity Plans.

The Board of Directors proposes to increase the Company's conditional share capital for employee equity plans by 5,000,000 Common Shares in order to cover any future share issuances due to the exercise of equity incentive awards under the Company's employee equity plans and amend art. 3c para. 1 of the Articles of Association as follows:

Art. 3c Conditional Share Capital for Employee Benefit Plans

The share capital of the Company shall be increased by an amount not exceeding CHF 624,192.99 through the issue of a maximum of 20,806,433 registered shares, payable in full, each with a nominal value of CHF 0.03, in connection with the exercise of option rights granted to any employee of the Company or a subsidiary, and any consultant, members of the Board of Directors, or other person providing services to the Company or a subsidiary.

Art. 3c Bedingtes Aktienkapital für Mitarbeiterbeteiligungspläne

Das Aktienkapital kann durch die Ausgabe von höchstens 20'806'433 voll zu liberierenden Namenaktien im Nennwert von je CHF 0.03 um höchstens CHF 624'192.99 durch Ausübung von Optionsrechten erhöht werden, welche Mitarbeitenden der Gesellschaft oder ihrer Tochtergesellschaften, Personen in vergleichbaren Positionen, Beratern, Verwaltungsratsmitgliedern oder anderen Personen, welche Dienstleistungen zu Gunsten der Gesellschaft erbringen, gewährt wurden.

8. Approval of increasing the maximum size of the Board of Directors.

The Board of Directors proposes to increase the maximum size of the Board to 10 members, and to amend art. 20 of the Articles of Association to reflect the foregoing as follows:

Art. 20 Number of Members, Term of Office

The Board of Directors shall consist of at least 3 and not more than 10 members. The chairman and the members of the Board of Directors are individually elected by the General Meeting for a term of one year until the end of the next Ordinary General Meeting, provided that he/she does not resign or is not replaced during his term.

The members of the Board of Directors may be re-elected without limitation. The maximum age limit of members of the Board shall be 75 years. When a member of the Board of Directors reaches this age limit during his term of office, such term shall automatically extend to the next ordinary shareholders' meeting. The shareholders' meeting may resolve to grant an exception to the age limit.

Art. 20 Anzahl der Mitglieder, Amtsdauer

Der Verwaltungsrat besteht aus mindestens 3 und höchstens 10 Mitgliedern. Der Präsident sowie die Mitglieder des Verwaltungsrates werden jeweils für die Dauer von einem Jahr bis zum Ende der nächsten ordentlichen Generalversammlung einzeln gewählt. Vorbehalten bleiben vorheriger Rücktritt oder Abberufung.

Die Mitglieder des Verwaltungsrates sind jederzeit wieder wählbar. Die oberste Altersgrenze von Mitgliedern des Verwaltungsrates beträgt 75 Jahre. Wenn ein Mitglied des Verwaltungsrates diese Altersgrenze während seiner Amtszeit erreicht, wird diese automatisch zur nächsten ordentlichen Generalversammlung verlängert. Die Generalversammlung kann eine Ausnahme von der Altersgrenze beschliessen.

9. Approval of increasing the maximum number of authorized share capital and extending the date by which the Board of Directors may increase the share capital.

The Board of Directors proposes to increase the authorized share capital to 39,316,975 shares, to extend the date by which the Board of Directors may increase the share capital to June 10, 2023, and to amend art. 3a para. 1 of the Articles of Association to reflect the foregoing as follows:

Art. 3a Authorized Share Capital

The Board of Directors is authorized to increase the share capital, in one or several steps until 10 June 2023, by a maximum amount of CHF 1,179,509.25 by issuing a maximum of 39,316,975 registered shares with a par value of CHF 0.03 each, to be fully paid up. An increase of the share capital (i) by means of an offering underwritten by a financial institution, a syndicate or another third party or third parties, followed by an offer to the then-existing shareholders of the Company and (ii) in partial amounts shall also be permissible.

Art. 3a Genehmigtes Kapital

Der Verwaltungsrat ist ermächtigt, jederzeit bis zum 10. Juni 2023, das Aktienkapital im Maximalbetrag von CHF 1'179'509.25 durch Ausgabe von höchstens 39'316'975 vollständig zu liberierende Namenaktien mit einem Nennwert von je CHF 0.03 zu erhöhen. Eine Erhöhung des Aktienkapitals (i) durch die Zeichnung von Aktien aufgrund eines von einem Finanzinstitut, eines Verbandes, einer anderen Drittpartei oder Drittparteien unterzeichneten Angebots, gefolgt von einem Angebot gegenüber den zu diesem Zeitpunkt bestehenden Aktionären der Gesellschaft sowie (ii) in Teilbeträgen ist zulässig.

10. Re-election of the independent voting rights representative.

The Board of Directors proposes the re-election of lic. iur. Marius Meier, Attorney at Law, Lautengartenstrasse 7, CH-4052 Basel, as the independent voting rights representative until the closing of the 2022 annual general meeting of shareholders.

11. Re-election of the auditors.

The Board of Directors proposes to re-elect Ernst & Young AG as the Company's statutory auditor for the term of office of one year and the re-election of Ernst & Young LLP as the Company's independent registered public accounting firm for the year ending December 31, 2021.

12. Transaction of any other business that may properly come before the 2021 Annual General Meeting or any adjournment or postponement thereof.

In light of the global spread of the SARS-CoV-2 virus (coronavirus) and the COVID-19 pandemic and the uncertainty whether our chairman or any member of the Board of Directors will be able to personally attend the 2021 Annual General Meeting, the Board of Directors may make an ad hoc proposal for the election of an ad hoc chairperson of the 2021 Annual General Meeting if neither our chairman nor any other member of the Board of Directors is able to preside at the 2021 Annual General Meeting.

Organizational Matters / No Attendance in Person

The foregoing items of business are more fully described in the Company's proxy statement, which forms a part of this notice and is incorporated herein by reference.

We have elected to provide access to our proxy materials over the Internet under the US Securities and Exchange Commission's "notice and access" rules. We believe that providing our proxy materials over the Internet expedites shareholders' receipt of proxy materials, lowers costs and reduces the environmental impact of our annual general meeting.

We encourage you to read the proxy statement and submit your proxy or voting instructions as soon as possible. Please review the instructions on each of your voting options described in the proxy statement.

Important information: As indicated above, due to the current spread of the SARS-CoV-2 virus (coronavirus) and the COVID-19 pandemic in Switzerland and globally, and in accordance with the Swiss Federal Act on the Statutory Principles for Federal Council Ordinances on Combating the COVID-19 Epidemic of 25 September 2020, and the Ordinance 3 on Measures to Combat the Coronavirus (COVID-19), enacted by the Swiss Federal Council on June 19, 2020, in each case as amended from time to time (the COVID-19 Regime), in-person attendance of shareholders at the 2021 Annual General Meeting will not be possible.

Shareholders of record at the close of business on April 16, 2021 will be entitled to notice of and to vote their shares at the 2021 Annual General Meeting (or any adjournment or postponement thereof) by giving voting instructions to the independent proxy through the internet, telephone or sending the proxy card by mail, all as further described in the Company's proxy statement (accessible at www.proxydocs.com/CRSP).

Thank you for your ongoing support and continued interest in CRISPR Therapeutics AG.

By order of the Board of Directors,

Rodger Novak, M.D.

Chairman of the Board of Directors



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