Press Release

RedHill Biopharma Increases Previously Announced Bought Deal to $25 Million

TEL AVIV, Israel and RALEIGH, NC, January 12, 2021, RedHill Biopharma Ltd. (Nasdaq: RDHL) ("RedHill" or the "Company"), a specialty biopharmaceutical company, today announced that due to demand, the underwriter has agreed to increase the size of the previously announced offering and purchase on a firm commitment basis 3,188,776 American Depositary Shares (ADSs) of the Company, at a price to the public of $7.84 per ADS, less underwriting discounts and commissions. Each ADS represents ten ordinary shares, par value NIS 0.01 per share, of the Company. The closing of the offering is expected to occur on or about January 14, 2021, subject to satisfaction of customary closing conditions.

H.C. Wainwright & Co. is acting as the sole book-running manager for the offering.

The Company also has granted to the underwriter a 30-day option to purchase up to additional 478,316 ADSs at the public offering price, less underwriting discounts and commissions.

The gross proceeds to RedHill, before deducting underwriting discounts and commissions and offering expenses and assuming no exercise of the underwriter's option to purchase additional ADSs, are expected to be approximately $25 million. The Company intends to use the net proceeds from this offering to fund its clinical development programs, commercialization activities and for acquisitions and general corporate purposes.

The securities described above are being offered by RedHill pursuant to a "shelf" registration statement on Form F-3 (File No. 333-226278) previously filed with the Securities and Exchange Commission (the "SEC") on July 23, 2018 and declared effective by the SEC on July 31, 2018. The offering of the securities is being made only by means of a prospectus, including a prospectus supplement, forming a part of the effective registration statement. A preliminary prospectus supplement and accompanying prospectus relating to the securities being offered have been filed with the SEC and are available on

the SEC's website at http://www.sec.gov. A final prospectus supplement and the accompanying prospectus relating to the offering will be filed with the SEC and , upon filing, may be obtained on the SEC's website at http://www.sec.gov or by contacting H.C. Wainwright & Co., LLC at 430 Park Avenue, 3rd Floor, New York, NY 10022, by phone at (646) 975-6996 or e-mail at placements@hcwco.com.

This press release shall not constitute an offer to sell or a solicitation of an offer to buy these securities, nor shall there be any sale of these securities in any state or other 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 other jurisdiction.

About RedHill Biopharma

RedHill Biopharma Ltd. (Nasdaq: RDHL) is a specialty biopharmaceutical company primarily focused on gastrointestinal and infectious diseases. RedHill promotes the gastrointestinal drugs, **Movantik®** for opioid-induced constipation in adults[1], **Talicia®** for the treatment of *Helicobacter pylori (H. pylori)* infection in adults[2], and **Aemcolo®** for the treatment of travelers' diarrhea in adults[3]. RedHill's key clinical late-stage development programs include: (i) **RHB-204**, with an ongoing Phase 3 study for pulmonary nontuberculous mycobacteria (NTM) disease; (ii) **opaganib (Yeliva®)**, a first-in-class SK2 selective inhibitor targeting multiple indications with a Phase 2/3 program for COVID-19 and Phase 2 studies for prostate cancer and cholangiocarcinoma ongoing; (iii) **RHB-104**, with positive results from a first Phase 3 study for Crohn's disease; (iv) **RHB-102** (**Bekinda®**), with positive results from a Phase 3 study for acute gastroenteritis and gastritis and positive results from a Phase 2 study for IBS-D; (v) **RHB-107** (**upamostat**), a Phase 2-stage serine protease inhibitor with a planned Phase 2/3 study in symptomatic COVID-19 and targeting multiple other cancer and inflammatory gastrointestinal diseases; and (vi) **RHB-106**, an encapsulated bowel preparation. More information about the Company is available at www.redhillbio.com.

This press release contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. Such statements may be preceded by the words "intends," "may," "will," "plans," "expects," "anticipates," "projects," "predicts," "estimates," "aims," "believes," "hopes," "potential" or similar words. Forward-looking statements include statements regarding: the completion of the offering, the satisfaction of customary closing conditions related to the offering and the intended use of net proceeds from the offering. Forward-looking statements are based on certain assumptions and are subject to various known and unknown risks and uncertainties, many of which are beyond the Company's control and cannot be predicted or quantified, and consequently, actual results may differ materially from those expressed or implied by such forward-looking statements. Such risks and uncertainties include, without limitation; market and other conditions and the satisfaction of customary closing conditions related to the offering; the risk that the Company will not succeed to complete the patient recruitment; the risk that the Company will not receive the relevant data required for benefiting from the Fast Track designation; the risk that the U.S. Phase 3 clinical study evaluating RHB-204 will not be successful or, if successful, will not suffice for regulatory

marketing approval without the need for additional clinical and/or other studies; as well as risks and uncertainties associated with (i) the initiation, timing, progress and results of the Company's research, manufacturing, pre-clinical studies, clinical trials, and other therapeutic candidate development efforts, and the timing of the commercial launch of its commercial products and ones it may acquire or develop in the future; (ii) the Company's ability to advance its therapeutic candidates into clinical trials or to successfully complete its pre-clinical studies or clinical trials or the development of a commercial companion diagnostic for the detection of MAP; (iii) the extent and number and type of additional studies that the Company may be required to conduct and the Company's receipt of regulatory approvals for its therapeutic candidates, and the timing of other regulatory filings, approvals and feedback; (iv) the manufacturing, clinical development, commercialization, and market acceptance of the Company's therapeutic candidates and Talicia®; (v) the Company's ability to successfully commercialize and promote Talicia®, and Aemcolo® and Movantik®; (vi) the Company's ability to establish and maintain corporate collaborations; (vii) the Company's ability to acquire products approved for marketing in the U.S. that achieve commercial success and build its own marketing and commercialization capabilities; (viii) the interpretation of the properties and characteristics of the Company's therapeutic candidates and the results obtained with its therapeutic candidates in research, pre-clinical studies or clinical trials; (ix) the implementation of the Company's business model, strategic plans for its business and therapeutic candidates; (x) the scope of protection the Company is able to establish and maintain for intellectual property rights covering its therapeutic candidates and its ability to operate its business without infringing the intellectual property rights of others; (xi) parties from whom the Company licenses its intellectual property defaulting in their obligations to the Company; (xii) estimates of the Company's expenses, future revenues, capital requirements and needs for additional financing; (xiii) the effect of patients suffering adverse experiences using investigative drugs under the Company's Expanded Access Program; (xiv) competition from other companies and technologies within the Company's industry; and (xv) the hiring and employment commencement date of executive managers. More detailed information about the Company and the risk factors that may affect the realization of forward-looking statements is set forth in the Company's filings with the Securities and Exchange Commission (SEC), including the Company's Annual Report on Form 20-F filed with the SEC on March 4, 2020. All forward-looking statements included in this press release are made only as of the date of this press release. The Company assumes no obligation to update any written or oral forward-looking statement, whether as a result of new information, future events or otherwise unless required by law.

Company contact:
Adi Frish
Chief Corporate & Business Development Officer
RedHill Biopharma
+972-54-6543-112
adi@redhillbio.com

Media contact (U.S.):
Bryan Gibbs
Vice President
Finn Partners
+1 212 529 2236
bryan.gibbs@finnpartners.com

[1] Full prescribing information for Movantik® (naloxegol) is available at: www.Movantik.com.
[2] Full prescribing information for Talicia® (omeprazole magnesium, amoxicillin and rifabutin) is available at: www.Talicia.com.
[3] Full prescribing information for Aemcolo® (rifamycin) is available at: www.Aemcolo.com.