Press Release

RedHill Biopharma Prices Concurrent Public Offering and Registered Direct Offering of its American Depositary Shares and Warrants

TEL-AVIV, Israel, December 21, 2016 RedHill Biopharma Ltd. (NASDAQ/TASE: RDHL) ("RedHill" or the "Company"), a biopharmaceutical company primarily focused on the development and commercialization of late clinical-stage, proprietary, orally-administered, small molecule drugs for gastrointestinal and inflammatory diseases and cancer, today announced the pricing of its previously announced underwritten public offering and its concurrent registered direct offering of American Depositary Shares ("ADSs") and warrants to purchase ADSs for expected aggregate gross proceeds, before deducting underwriting agent discounts and commissions, placement agent fees and other offering expenses, of approximately $38 million.

The pricing for the underwritten public offering was for a total number of 2,250,000 ADSs, each representing ten of its ordinary shares, and warrants to purchase 1,125,000 ADSs, for expected gross proceeds of approximately $23 million. The pricing for the concurrent registered direct offering was for a total number of 1,463,415 ADSs and warrants to purchase 731,708 ADSs for expected gross proceeds of approximately $15 million.

The price in both offerings is $10.25 for a fixed combination of one ADS and a warrant to purchase 0.5 of an ADS. The warrants in both offerings will have a per ADS exercise price of $13.33, and have a term of three years.

The offering is expected to close on December 27, 2016, subject to customary closing conditions. RedHill has also granted the underwriters in the underwritten public offering a 30-day option to purchase up to 337,500 additional ADSs, and warrants to purchase up to 168,750 additional ADSs, or any combination thereof.

Roth Capital Partners is acting as sole book-running manager and Echelon Wealth Partners is acting as Canadian manager for the underwritten public offering with respect to sales in Canada. Roth Capital Partners is acting as placement agent in the registered direct offering.

The Company intends to use the proceeds from both offerings to fund clinical development programs, for potential acquisitions, to support commercial operations and for general corporate purposes.

The ADSs and warrants will be issued pursuant to a shelf registration statement that was previously filed with, and declared effective by, the Securities and Exchange Commission (the "SEC"). A

preliminary prospectus supplement related to the underwritten public offering has been filed with the SEC and is available on the SEC's website located at www.sec.gov, and a final prospectus supplement related to each of the offerings will be filed with the SEC and will be available on the SEC's website.

This press release shall not constitute an offer to sell or the solicitation of an offer to buy, nor shall there be any sale of these securities in any jurisdiction in which such offer, solicitation or sale would be unlawful prior to the registration or qualification under the securities laws of any such jurisdiction.

This offering will be made only by means of a prospectus. Copies of the preliminary prospectus supplement and the accompanying prospectus relating to the underwritten public offering may be obtained, when available, by contacting Roth Capital Partners, Attention: Equity Capital Markets, 888 San Clemente Drive, Newport Beach, CA 92660, or by telephone at 800-678-9147, or by email at RothECM@roth.com.

About RedHill Biopharma Ltd.:
RedHill Biopharma Ltd. (NASDAQ/TASE: RDHL) is a biopharmaceutical company headquartered in Israel, primarily focused on the development and commercialization of late clinical-stage, proprietary, orally-administered, small molecule drugs for the treatment of gastrointestinal and inflammatory diseases and cancer. RedHill's pipeline of proprietary products includes: (i) **RHB-105 -** an oral combination therapy for the treatment of *Helicobacter pylori* infection with successful results from a first Phase III study; (ii) **RHB-104 -** an oral combination therapy for the treatment of Crohn's disease with an ongoing first Phase III study and a completed proof-of-concept Phase IIa study for multiple sclerosis; (iii) **BEKINDA® (RHB-102) -** a once-daily oral pill formulation of ondansetron with an ongoing Phase III study for acute gastroenteritis and gastritis and an ongoing Phase II study for IBS-D; (iv) **RHB-106 -** an encapsulated bowel preparation licensed to Salix Pharmaceuticals, Ltd.; (v) **YELIVA® (ABC294640) -** a Phase II-stage, orally-administered, first-in-class SK2 selective inhibitor targeting multiple oncology, inflammatory and gastrointestinal indications; (vi) **MESUPRON -** a Phase II-stage first-in-class, orally-administered uPA inhibitor, targeting gastrointestinal and other solid tumors and (vii) **RIZAPORT® (RHB-103) -** an oral thin film formulation of rizatriptan for acute migraines, with a U.S. NDA currently under discussion with the FDA and marketing authorization received in Germany in October 2015.

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 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, risks and uncertainties associated with (i) the initiation, timing, progress and results of the Company's research, manufacturing, preclinical studies, clinical trials, and other therapeutic candidate development efforts; (ii) the Company's ability to advance its therapeutic candidates into clinical trials or to successfully complete its preclinical studies or clinical trials; (iii) the extent and number 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; (v) the Company's

ability to establish and maintain corporate collaborations; (vi) 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; (vii) the interpretation of the properties and characteristics of the Company's therapeutic candidates and of the results obtained with its therapeutic candidates in research, preclinical studies or clinical trials; (viii) the implementation of the Company's business model, strategic plans for its business and therapeutic candidates; (ix) 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; (x) parties from whom the Company licenses its intellectual property defaulting in their obligations to the Company; (xi) estimates of the Company's expenses, future revenues capital requirements and the Company's needs for additional financing; (xii) competitive companies and technologies within the Company's industry; and (xiii) the impact of the political and security situation in Israel on the Company's business. 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 February 25, 2016. All forward-looking statements included in this Press Release are made only as of the date of this Press Release. We assume no obligation to update any written or oral forward-looking statement unless required by law.

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