March 28, 2018

# Molecular Templates, Inc. Reports Fourth Quarter 2017 Financial Results

***Update on MT-3724 Provided at World ADC Conference; More Data Expected in 2Q18***

***Upcoming Presentations at AACR Conference to Feature Data on PD-L1 Antigen Seeding ETB and HER2 ETB***

AUSTIN, Texas, March 28, 2018 (GLOBE NEWSWIRE) -- Molecular Templates, Inc. (Nasdaq:MTEM) ("Molecular"), a clinical-stage oncology company focused on the discovery and development of the company's proprietary engineered toxin bodies (ETBs), which are differentiated, targeted, biologic therapeutics for cancer, today reported financial results for the fourth quarter of 2017. As of December 31, 2017, cash and cash equivalents totaled $58.9 million. Molecular's current cash balance is expected to fund operations into late 2019.

"We are excited by the continued progress of our pipeline as well as our partnership with Takeda," said Eric Poma, Ph.D., CEO and CSO of Molecular Templates. "We expect the remainder of 2018 to bring more data on our lead program MT-3724 in DLBCL, additional IND filings for other pipeline programs, and the potential for more business development transactions that would support additional programs with non-dilutive capital."

**Company Highlights and Upcoming Milestones**

Corporate

- In 4Q17, Molecular expanded its senior management team with the additions of Adam Cutler as Chief Financial Officer; Barbara Ruskin J.D. Ph.D. as SVP, General Counsel and Chief Patent Officer; Nenad Sarapa M.D. M.S. as SVP of Clinical Development, and Conrad Jordaan as SVP of Finance and Corporate Controller.
- On March 2, 2018, Molecular closed a $10 million debt facility with Perceptive Advisors. The proceeds were used to repay an existing debt facility with Silicon Valley Bank and will support Molecular's build out of its GMP manufacturing facility, which should shorten the time from lead development to IND and better support Molecular's own pipeline as well as partnerships.

MT-3724

- MT-3724 (an ETB targeting CD20) is in an ongoing Phase Ib expansion study intended to better define the overall response rate to this candidate as a single-agent in heavily pre-treated diffuse large B-cell lymphoma (DLBCL) patients.
- A brief update on the first three patients dosed in the MT-3724 Phase Ib expansion study was delivered at the World ADC Summit Europe today. Observations included the following:

    - One of the three patients achieved a partial response (PR) after a single dose of MT-3724. The PR was confirmed at the end of cycle 2 per protocol and the patient remains on study with continued dosing of MT-3724. The other two patients were assessed as having stable disease (SD) and progressive disease (PD).
    - A dose interruption and reduction was required in two of the first three patients in Phase Ib expansion. These patients had high body weights which resulted in high absolute doses of MT-3724 based on 75 mcg/kg dosing. The adverse events observed (grade 2 and 3) were reversible and dosing resumed at 50 mcg/kg, which has been generally well tolerated.
    - Based on these data, the deep and sustained clinical responses to MT-3724 observed at doses as low as 5 mcg/kg, as well as the near-complete peripheral B-cell depletion at doses up to 50 mcg/kg, the maximum tolerated dose (MTD) of MT-3724, has been defined as 50 mcg/kg with a maximum total drug per dose of 6,000 mcg, or 6 mg.
- Enrollment in the Phase Ib expansion study continues, with further updates on results expected in 2Q18.
- Nine DLBCL patients with low serum levels of rituximab have been treated at doses ranging from 5 mcg/kg to 75 mcg/kg in the Phase I dose-finding and Phase Ib expansion studies. In these nine patients, one complete response, two partial responses, three patients with stable disease (including one patient with a 48% reduction in tumor size), and three patients with progressive disease, were observed.
- Based on the peripheral B-cell depletion observed at 50 mcg/kg and responses seen at doses as low as 5 mcg/kg, 50 mcg/kg appears to be an efficacious and well-tolerated dose.
- Molecular also expects to initiate combination studies with MT-3724 in earlier lines of DLBCL therapy in 2Q18.

Takeda Collaboration

- In December 2017, Takeda selected two targets for further research using Molecular's ETBs. This has triggered $4 million in milestone payments to be paid by Takeda in 2018.
- Takeda and Molecular are evaluating CD38 ETBs and could select a drug candidate for development by the end of 2Q18.

MT-4019

- MT-4019, an ETB candidate that is designed to target CD38-expressing myeloma cancer cells, is progressing through IND enabling studies. If Takeda and Molecular do not select a joint candidate for development, Molecular anticipates filing an IND application for MT-4019 in mid-2018 to initiate a Phase I clinical trial in the United States in 2H18.

Research

- Preclinical data for Molecular's ETBs targeting PD-L1 (which incorporates Molecular's Antigen Seeding Technology – a differentiated immune-oncology approach) and HER2 will be presented at the American Association of Cancer Research (AACR) annual meeting in April 2018

- Molecular expects to file an IND application for an ETB targeting HER2 in 4Q18
- Molecular expects to file an IND application for an ETB targeting PD-L1 (with antigen seeding) in 1Q19
- Several other ETB candidates are in preclinical development targeting both solid and hematological cancers

**Financial Results**

The net loss attributable to common shareholders for the fourth quarter was $6.9 million, or $0.26 per basic and diluted share. This is compared to a net loss attributable to common shareholders for the same period in 2016, of $2.9 million, or $13.82 per basic and diluted share.

Revenues for the fourth quarter of 2017 were $0.8 million, compared to $0.4 million for the same period in 2016. Revenues in the fourth quarters of 2017 and 2016 were comprised of grant revenue from the Cancer Prevention & Research Institute of Texas ("CPRIT"). Total research and development (R&D) expenses for the fourth quarter of 2017 were $4.7 million, compared with $1.7 million for the same period in 2016. Total general and administrative (G&A) expenses for the fourth quarter of 2017 were $3.5 million, compared with $1.1 million for the same period in 2016.

Revenues for the year ended December 31, 2017 were $3.4 million, compared to $1.9 million for 2016. These revenues were primarily comprised of research and development revenues from our collaboration with Takeda of $1.9 million, and grant revenue from CPRIT of $1.0 million. Revenues for the same period in 2016 comprised of grant revenue from CPRIT. Total R&D expenses for the year ended December 31, 2017 were $9.5 million, compared to $8.0 million for 2016. Total G&A expenses for the year ended December 31, 2017 were $11.8 million, compared to $4.5 million for 2016.

The net loss attributable to common shareholders for the year ended December 31, 2017 was $24.1 million, or $2.11 per basic and diluted share, compared to a net loss attributable to common shareholders of $12.6 million or $59.04 per basic and diluted share, for 2016. As of December 31, 2017, cash and cash equivalents totaled $58.9 million. Molecular's current cash balance is expected to fund operations into late 2019.

**About Molecular Templates**

Molecular Templates is a clinical-stage oncology company focused on the discovery and development of differentiated, targeted, biologic therapeutics for cancer. We believe our proprietary biologic drug platform technology, referred to as engineered toxin bodies, or ETBs, provides a differentiated mechanism of action that may address some of the limitations associated with currently available cancer therapeutics. ETBs utilize a genetically engineered form of Shiga-like Toxin A subunit, or SLTA, a ribosome inactivating bacterial protein, that can be targeted to specifically destroy cancer cells. Additional information about Molecular Templates can be obtained at http://www.mtem.com.

**Forward-Looking Statements**

*This press release contains forward-looking statements for purposes of the Private Securities Litigation Reform Act of 1995 (the "Act"). Molecular Templates disclaims any*

*intent or obligation to update these forward-looking statements, and claims the protection of the Act's Safe Harbor for forward-looking statements. All statements, other than statements of historical facts, included in this press release regarding strategy, future operations, future financial position, future revenue, projected expenses, prospects, plans and objectives of management are forward-looking statements. In addition, when or if used in this press release, the words "may," "could," "should," "anticipate," "believe," "estimate," "expect," "intend," "plan," "predict" and similar expressions and their variants, as they relate to Molecular Templates may identify forward-looking statements. Examples of such statements include, but are not limited to, statements relating to the development of the Company's lead program, MT-3724; the expected timing of submitting various IND applications and initiating studies; and the Company's belief that its proprietary biologic drug platform technology, or ETBs, provides for a differentiated mechanism of action that may address some of the limitations associated with currently available cancer therapeutics.*

*Forward-looking statements are not guarantees of future performance and involve risks and uncertainties. Actual events or results may differ materially from those discussed in the forward-looking statements as a result of various factors including, but not limited to, the uncertainties inherent in the preclinical and clinical development process; whether the Company's cash resources will be sufficient to fund its continuing operations for the periods and/or trials anticipated; the ability of the Company to protect its intellectual property rights; and legislative, regulatory, political and economic developments, as well as those risks identified under the heading "Risk Factors" in the Company's filings with the SEC. Any forward-looking statements contained in this press release speak only as of the date hereof, and the Company specifically disclaims any obligation to update any forward-looking statement, whether because of new information, future events or otherwise.*

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**Molecular Templates, Inc.**
**Condensed Consolidated Statements of Operations**
**(in thousands, except per share data)**
**(unaudited)**

| | Three Months Ended | | Year Ended | |
|---|---|---|---|---|
| | December 31, 2017 | December 31, 2016 | December 31, 2017 | December 31, 2016 |
| Revenues: | | | | |
| Research and development revenue from collaboration agreements | $ — | $ — | $ 2,408 | $ — |
| Grant revenue | 820 | 353 | 987 | 1,880 |
| Total revenues | 820 | 353 | 3,395 | 1,880 |
| Operating Expenses: | | | | |
| Research and development | 4,657 | 1,658 | 9,487 | 8,017 |
| General and administrative | 3,523 | 1,110 | 11,755 | 4,482 |
| Total operating expenses | 8,180 | 2,768 | 21,242 | 12,499 |
| Operating loss | (7,360 ) | (2,415 ) | (17,847 ) | (10,619 ) |
| Interest and other, net | 346 | (150 ) | (674 ) | (409 ) |
| (Gain)/Loss on conversion of notes | 99 | — | (4,619 ) | — |
| Net loss | (6,915 ) | (2,565 ) | (23,140 ) | (11,028 ) |
| Deemed dividends on preferred stock | — | (393 ) | (958 ) | (1,572 ) |
| Net loss attributable to common shareholders | $ (6,915 ) | $ (2,958 ) | $ (24,098 ) | $ (12,600 ) |
| Net loss per share – basic and diluted | $ (0.26 ) | $ (13.82 ) | $ (2.11 ) | $ (59.04 ) |
| Weighted average shares used in computing net loss per share – basic and diluted | 26,893 | 214 | 11,401 | 213 |

## Molecular Templates, Inc.
## Condensed Consolidated Balance Sheets
## (in thousands)

| | December 31, 2017 | December 31, 2016 |
|---|---|---|
| **Assets** | | |
| Cash and cash equivalents | $ 58,910 | $ 1,716 |
| Prepaid expenses and other | 1,504 | 127 |
| Total current assets | 60,414 | 1,843 |
| Property and equipment, net | 1,952 | 334 |
| In-process research and development | 26,623 | — |
| Intangible assets and other | 1,402 | 921 |
| **Total assets** | $ 90,391 | $ 3,098 |
| **Liabilities and stockholders' equity** | | |
| Accounts payable and accrued liabilities | $ 5,207 | $ 2,144 |
| Current portion of long-term debt | 2,400 | 2,400 |
| Related party debt | — | 7,315 |
| Deferred revenue | 2,765 | 1,870 |
| Other current liabilities | 70 | 36 |
| Total current liabilities | 10,442 | 13,765 |
| Warrant liabilities | 954 | 49 |
| Long-term debt, net of current portion | 1,078 | 3,165 |
| Other liabilities | 628 | 53 |
| Redeemable convertible preferred stock | | 25,871 |
| Stockholders’ equity | 77,289 | (39,805) |
| **Total liabilities and stockholders' equity** | $ 90,391 | $ 3,098 |

Source: Molecular Templates, Inc.