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

DIVISION OF
CORPORATION FINANCE

September 16, 2023

Christopher Chapman, Jr.
Chief Executive Officer
Telomir Pharmaceuticals, Inc.
900 West Platt Street, Suite 200
Tampa, FL 33606

Re: Telomir Pharmaceuticals, Inc.
Draft Registration Statement on Form S-1
Submitted August 14, 2023
CIK No. 0001971532

Dear Christopher Chapman:

We have reviewed your draft registration statement and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by providing the requested information and either submitting an amended draft registration statement or publicly filing your registration statement on EDGAR. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing the information you provide in response to these comments and your amended draft registration statement or filed registration statement, we may have additional comments.

Draft Registration Statement on Form S-1

Prospectus Summary, page 1

1. Please revise your prospectus summary to explain briefly at first use each of the following scientific terms:
   - Iron chelators,
   - Rapamycin,
   - Ames test
   - Metalloproteinases (MMP) inhibitor, and
   - Eurofins BioMap studies and Eurofins invitro studies.

Hemochromatosis, page 1

2. We note your reference on page 2 regarding a “sizeable patient population." With reference to your 150,000 patient estimate (2018-2022) on page 54, please revise the Summary to quantify the size of the patient population.

3. We note your disclosure on page 2 that in preclinical stage testing, TELOMIR-1 is “shown” to have “better” metal complexing than Doxycycline, an FDA-approved metalloproteinases (MMP) inhibitor. Please balance this statement with the disclosure on page 14 that your conclusions based on your pre-clinical data may prove inaccurate, and is not indicative of future results.

Intellectual Property, page 3

4. We note your disclosure identifying your founder, Jonnie R. Williams, Sr. as the inventor of TELOMIR-1. Please revise to discuss Mr. Williams scientific training and, as applicable, his background in developing novel small molecules. Disclose when he first commenced working on TELOMIR-1.

5. Please revise here and elsewhere in the prospectus, where appropriate, to explain what a provisional patent application is and how it differs from a nonprovisional patent application. Revise your risk factor disclosure to explain the risks associated with not having patent coverage for the work you are conducting.

6. We note your reference to MIRALOGX filing two provisional patent applications. We also note your disclosure on page 30 that MIRALOGX holds the patent rights to TELOMIR-1, which are currently comprised of a pending U.S. provisional patent application. Please clarify whether there are one or two provisional patent applications.

7. Discuss the current plans, if applicable, for filing nonprovisional patent applications relating to the TELOMIR-1 technology. Discuss the timing and indicate whether funding is needed to prepare the applications. Absent a filed nonprovisional patent application, revise to remove the disclosure highlighting patent protection extending through September 2053.

8. Revise the Summary to explain the invention(s) addressed in the two provisional patent applications as well as the filing and expirations dates for these applications. Also revise the Business section to provide additional material information concerning the provisional patent applications, including the application numbers.

Summary Risk Factors, page 4

9. With reference to your disclosure on page 11, please expand the disclosure in the seventh bullet point on page 4 to highlight that Dr. Christopher Chapman, who serves as your Chief Executive Officer, Chief Medical Officer and Chairman, and Erez Aminov, who is your President, are both expected to work on a part-time and as-needed basis.

Implications of Being an Emerging Growth Company, page 6

10. Your disclosure on page 6 indicates that you intend to avail yourselves of the extended transition period for complying with new or revised accounting standards. The cover page indicates the opposite. Please revise to address this apparent inconsistency.

Risk Factors, page 10

11. Please add risk factor disclosure concerning related-party arrangements and conflicts of interest with MIRALOGX and Jonnie. R. Williams, Sr.. Also, tell us whether any other officers, directors or principal shareholders are affiliated with MIRALOGX.

12. Please disclose any risks or potential risks of conflict of interest, if material, resulting from the relationship between you and MIRA Pharmaceuticals. In this regard, we note your senior management and certain members of your Board of Directors are also officers and directors at MIRA Pharmaceuticals.

Overview, page 46

13. Your disclosure here and in the Summary section indicate that you have completed several pre-clinical proof-of-concept studies that were designed to demonstrate that TELOMIR-1 is not mutagenic and has good biological and metal binding capabilities. Please revise the Business section to describe each such study and explain how each study supports your claims concerning TELOMIR-1's potential. Discuss whether each study was powered for statistical significance. In terms of studies, we note that you do not appear to discuss or present date from the Ames test or the multiple Eurofins BioMap studies that you reference on pages 2 and 46.

14. Explain why you conducted one or more studies comparing TELOMIR-1 to Doxycycline, and present the data in support of the claims on page 2 and 46 concerning the comparison results.

15. Explain, if true, why you conducted a side-by-side comparison of TELOMIR-1 and rapamycin. Discuss whether rapamycin is approved to treat hemochromatosis or side effects associated with post-chemotherapy recovery in cancer patients.

Business

Post-Chemotherapy Recovery, page 47

16. With respect to footnote 1, the URL appears to be inactive. Please revise or remove the URL.

Mechanism of Action of TELOMIR-1, page 48

17. The disclosure in the first sentence references multiple preclinical studies; however, it appears that you only provide a brief discussion of one such study. Please revise to discuss each of these referenced studies with sufficient detail to explain the basis for your

belief.

18. Revise this section and the Summary, where applicable, to clearly indicate whether you or a third party conducted the preclinical trial depicted and described on pages 48-49. For instance, we note that the disclosure at the top of page 49 appears to indicate that a third-party conducted this study of TELOMIR-1 back in 2004 or earlier. Explain why TELOMIR-1 is compared to Diethylenetriamine (Dien).

19. Please revise to clarify what each graphic depicts. Also explain how the test was conducted and whether it involved serum testing.

Efficacy of TELOMIR-1 in reducing ferritin in aged mice, page 49

20. Discuss your relationship, if any, with Evotec.

Ongoing Pre-Clinical Proof-of Concept Studies, page 49

21. Please revise to discuss in greater detail each of the eight on-going studies. Indicate when each one commenced and the expected timeframe for the testing.

Completed Pre-Clinical Toxicology Studies, page 51

22. Please clarify, if true, that the "Human" and "human liver" in the "Species" column are in reference to *in vitro* studies.

Potential Market in Post-Chemotherapy, page 55

23. We note your reference that the FDA “will” determine TELOMIR-1 can be given as a standalone compound or in conjunction with existing therapies to accelerate recovery from chemotherapy. Please remove any statements regarding conclusions about FDA determinations.

Intellectual Property, page 57

24. Please expand your disclosure to ensure that you are disclosing all material terms of the MIRALOGX Licensing Agreement, including the following:
    - quantification of all up-front or execution payments paid to date;
    - aggregate amounts paid to date under the agreement; and
    - aggregate amounts of all potential development, regulatory and commercial milestone payments.

Certain Relationships..., page 76

25. We note your disclosure on page F-9 indicating that on April 1, 2023 you entered into an Agreement For Shared Lease Costs with MIRALOGX, LLC, and that you have agreed to make monthly contributions or payments in accordance with "the monthly use of shared aircraft toward rent payments." Please tell us the purpose of the agreement and indicate whether a related party owns the jet. Disclose the monthly contributions or payments made to date under the agreement. Also file this cost sharing agreement as well as the lease agreement as exhibits pursuant to Regulation S-K, Item 601(b)(10).

Principal Shareholders, page 77

26. We note your disclosure on page 43 indicating that Bay Shore Trust is a trust established by your founder, Jonnie R. Williams, Sr. Accordingly, please tell us whether Mr. Williams has voting and/or dispositive control over the 15,622,500 shares owned by Bay Shore Trust.

Report of Independent Registered Public Accounting Firm, page F-2

27. We note that your audit report does not fully conform to the format required by AS 3101. For example, we note that in the third paragraph your auditors' report references that it is required to be independent with respect to the company in accordance with the relevant ethical requirements relating to [your] audit. However, this language does not comply with AS 3101. We also note the auditors' report indicates their audits were conducted in accordance with the "auditing standards" of the PCAOB rather than the "standards" of the PCAOB. Please obtain an audit report that fully complies with AS 3101.

General

28. At first use, please define abbreviations throughout your draft registration statement. For example only, we note that "CMC" on page 37 and "qPCR" on page 50, which do not appear to be defined.

29. Please supplementally provide us with copies of all written communications, as defined in Rule 405 under the Securities Act, that you, or anyone authorized to do so on your behalf, present to potential investors in reliance on Section 5(d) of the Securities Act, whether or not they retain copies of the communications.

30. Please revise the Resale Prospectus Coverpage to indicate whether the selling stockholders are prohibited from selling their shares prior to the closing of the company's initial public offering.

You may contact Tara Harkins at 202-551-3639 or Lynn Dicker at 202-551-3616 if you have questions regarding comments on the financial statements and related matters. Please contact Jimmy McNamara at 202-551-7349 or Joe McCann at 202-551-6262 with any other questions.

Sincerely,

Division of Corporation Finance
Office of Life Sciences

cc: Curt Creely