UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form 6-K

Report of Foreign Private Issuer Pursuant to Rule 13a-16 or 15d-16 under the Securities Exchange Act of 1934

For the month of August 2016

Commission File Number 001-37626

Mesoblast Limited

(Exact name of Registrant as specified in its charter)

Not Applicable (Translation of Registrant's name into English)

Australia (Jurisdiction of incorporation or organization)

Silviu Itescu Chief Executive Officer and Executive Director Level 38 55 Collins Street Melbourne 3000 Australia (Address of principal executive offices)

Indicate by check mark whether the registrant files or will file annual reports under cover Form 20-F or Form 40-F:

Form 20-F ☑ Form 40-F □

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1):

Yes 🗆 No 🗹

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7):

Yes 🗆 No 🗹

INFORMATION CONTAINED ON THIS REPORT ON FORM 6-K

On August 19, 2016, Mesoblast Limited filed with the Australian Securities Exchange a new issue announcement, application for quotation of additional securities and agreement (Appendix 3B), which is attached hereto as <u>Exhibit 99.1</u> and is incorporated herein by reference.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly organized.

MESOBLAST LIMITED

/s/ Charlie Harrison

Charlie Harrison Senior Legal Counsel and Secretary

Dated: August 26, 2016

Item

99.1 Appendix 3B, dated August 19, 2016.

Appendix 3B

New issue announcement, application for quotation of additional securities and agreement

Information or documents not available now must be given to ASX as soon as available. Information and documents given to ASX become ASX's property and may be made public.

Introduced 01/07/96 Origin: Appendix 5 Amended 01/07/98, 01/09/99, 01/07/00, 30/09/01, 11/03/02, 01/01/03, 24/10/05, 01/08/12, 04/03/13

Name of entity

MESOBLAST LIMITED	

ABN

68 109 431 870

We (the entity) give ASX the following information.

Part 1 - All issues

You must complete the relevant sections (attach sheets if there is not enough space).

- 1 +Class of +securities issued or to be issued
- 2 Number of +securities issued or to be issued (if known) or maximum number which may be issued
- 3 Principal terms of the +securities (e.g. if options, exercise price and expiry date; if partly paid +securities, the amount outstanding and due dates for payment; if +convertible securities, the conversion price and dates for conversion)

Ordinary shares (fully paid).

280,911 fully paid ordinary shares.

280,911 fully paid ordinary shares as per the company's constitution. The full amount of shares are to be held in voluntary escrow until 19 August 2017

4	Do the +securities rank equally in all respects from the +issue date with an existing +class of quoted +securities?	¹ Yes for the ordinary shares.		
	If the additional +securities do not rank equally, please state:			
	• the date from which they do			
	• the extent to which they participate for the next dividend, (in the case of a trust, distribution) or interest payment			
	• the extent to which they do not rank equally, other than in relation to the next dividend, distribution or interest payment			
5	Issue price or consideration	US\$240,000		
6	Purpose of the issue (If issued as consideration for the acquisition of assets, clearly identify those assets)	Consideration for services in connection with the license of intellectual property relating to cell targeting technology (ex vivo fucosylation) from a third party.		
6a	Is the entity an +eligible entity that has obtained security holder approval under rule 7.1A?	No		
	If Yes, complete sections 6b – 6h <i>in relation to the</i> + <i>securities the subject of this Appendix 3B</i> , and comply with section 6i			
6b	The date the security holder resolution under rule 7.1A was passed	Not applicable		
6с	Number of +securities issued without security holder approval under rule 7.1	Not applicable		
6d	Number of +securities issued with security holder approval under rule 7.1A	Not applicable		

+ See chapter 19 for defined terms.

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1					
6e	Number of +securities issued with security holder approval under rule 7.3, or another specific security holder approval (specify date of meeting)	Not applicable			
6f	Number of +securities issued under an exception in rule 7.2	Not applicable			
6g	If +securities issued under rule 7.1A, was issue price at least 75% of 15 day VWAP as calculated under rule 7.1A.3? Include the +issue date and both values. Include the source of the VWAP calculation.	Not applicable			
6h	If +securities were issued under rule 7.1A for non- cash consideration, state date on which valuation of consideration was released to ASX Market Announcements	Not applicable			
6i	Calculate the entity's remaining issue capacity under rule 7.1 and rule 7.1A – complete Annexure 1 and release to ASX Market Announcements	Not applicable			
7	⁺ Issue dates Note: The issue date may be prescribed by ASX (refer to the definition of issue date in rule 19.12). For example, the issue date for a pro rata entitlement issue must comply with the applicable		Date Registered 19/08/2016 Total		
	timetable in Appendix 7A. Cross reference: item 33 of Appendix 3B.				
		Number		+Class	

Ordinary shares

381,654,048

8	Number and +class of all +securities quoted on
	ASX (including the +securities in section 2 if
	applicable)

,					
		Number	+Class		
9	Number and +class of all +securities not quoted on	22,004,490 (3,091,669 options have been	Unquoted options		
	ASX (including the +securities in section 2 if	cancelled since last Appendix 3B)			
	applicable)				
10	Dividend policy (in the case of a trust, distribution	All ordinary shares rank equally and participate in the right to dividends equally.			
	policy) on the increased capital (interests)				
Part 2 -	Pro rata issue				
11	Is security holder approval required?	Not applicable			
		·····			
12	Is the issue renounceable or non-renounceable?	Not applicable			
		**			
13	Ratio in which the +securities will be offered	Not applicable			
14	+Class of +securities to which the offer relates	Not applicable			
15	⁺ Record date to determine entitlements	Not applicable			
10					
16	Will holdings on different registers (or	Not applicable			
	subregisters) be aggregated for calculating entitlements?				
	entitements:				
17	Policy for deciding entitlements in relation to	Not applicable			
	fractions	i tot upplicable			
18	Names of countries in which the entity has	Not applicable			
	security holders who will not be sent new offer				
	documents				
	Note: Security holders must be told how their				
	entitlements are to be dealt with.				
	Cross reference: rule 7.7.				
	Closs feference. fulle 7.7.				
19	Closing date for receipt of acceptances or	Not applicable			
	renunciations	The appreciate			

+ See chapter 19 for defined terms.

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20	Names of any underwriters	Not applicable
21	Amount of any underwriting fee or commission	Not applicable
22	Names of any brokers to the issue	Not applicable
23	Fee or commission payable to the broker to the issue	Not applicable
24	Amount of any handling fee payable to brokers who lodge acceptances or renunciations on behalf of security holders	Not applicable
25	If the issue is contingent on security holders' approval, the date of the meeting	Not applicable
26	Date entitlement and acceptance form and offer documents will be sent to persons entitled	Not applicable
27	If the entity has issued options, and the terms entitle option holders to participate on exercise, the date on which notices will be sent to option holders	Not applicable
28	Date rights trading will begin (if applicable)	Not applicable
29	Date rights trading will end (if applicable)	Not applicable
30	How do security holders sell their entitlements <i>in full</i> through a broker?	Not applicable
31	How do security holders sell <i>part</i> of their entitlements through a broker and	Not applicable

accept for the balance?

32	How do security holders dispose of their entitlements (except by sale through a broker)?	Not applicable
33	+Issue date	Not applicable

Not applicable

Part 3 - Quotation of securities

You need only complete this section if you are applying for quotation of securities

34 Type of +securities (tick one)

- (a) X +Securities described in Part 1
- All other +securities (b)

Example: restricted securities at the end of the escrowed period, partly paid securities that become fully paid, employee incentive share securities when restriction ends, securities issued on expiry or conversion of convertible securities

Entities that have ticked box 34(a)

Additional securities forming a new class of securities

Tick to indicate you are providing the information or documents

- If the +securities are +equity securities, the names of the 20 largest holders of the additional +securities, and the number and percentage of 35 additional +securities held by those holders
- 36 If the +securities are +equity securities, a distribution schedule of the additional +securities setting out the number of holders in the categories 1 - 1,000 1,001 - 5,000 5,001 - 10,000 10,001 - 100,000 100,001 and over
- 37 A copy of any trust deed for the additional +securities

Entities that have ticked box 34(b)

38 Number of +securities for which +quotation is sought

Not applicable

+ See chapter 19 for defined terms.

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39	+Class of +securities for which quotation is soug	ht	Not applicable		
40	Do the +securities rank equally in all respects fro date with an existing +class of quoted +securities		Not applicable		
	If the additional +securities do not rank equally,	please state:			
	• the date from which they do				
	 the extent to which they participate for the r case of a trust, distribution) or interest paym 				
 the extent to which they do not rank equally, other than in relation to the next dividend, distribution or interest payment 					
41	Reason for request for quotation now		Not applicable		
	Example: In the case of restricted securities, end of restriction period				
	(if issued upon conversion of another +security, clearly identify that other +security)				
	_				
		Number		+Class	
42	Number and +class of all +securities quoted on	Not applicable		Not applicable	

ASX (*including* the +securities in clause 38)

Quotation agreement

- 1 +Quotation of our additional +securities is in ASX's absolute discretion. ASX may quote the +securities on any conditions it decides.
- 2 We warrant the following to ASX.
 - The issue of the +securities to be quoted complies with the law and is not for an illegal purpose.
 - There is no reason why those +securities should not be granted +quotation.
 - An offer of the +securities for sale within 12 months after their issue will not require disclosure under section 707(3) or section 1012C(6) of the Corporations Act.

Note: An entity may need to obtain appropriate warranties from subscribers for the securities in order to be able to give this warranty

- Section 724 or section 1016E of the Corporations Act does not apply to any applications received by us in relation to any +securities to be quoted and that no-one has any right to return any +securities to be quoted under sections 737, 738 or 1016F of the Corporations Act at the time that we request that the +securities be quoted.
- If we are a trust, we warrant that no person has the right to return the +securities to be quoted under section 1019B of the Corporations Act at the time that we request that the +securities be quoted.
- 3 We will indemnify ASX to the fullest extent permitted by law in respect of any claim, action or expense arising from or connected with any breach of the warranties in this agreement.
- 4 We give ASX the information and documents required by this form. If any information or document is not available now, we will give it to ASX before +quotation of the +securities begins. We acknowledge that ASX is relying on the information and documents. We warrant that they are (will be) true and complete.

Sign here: /s/ Charlie Harrison Company secretary

Print name: Charlie Harrison

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+ See chapter 19 for defined terms.

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Date: 19th August 2016