

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

MEMPHASYS LIMITED

ABN

33 120 047 556

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 | Options (unlisted) |
| 2 | Number of +securities issued or to be issued (if known) or maximum number which may be issued | <ol style="list-style-type: none">1. 989,681 options issued to a non-executive director2. 18,000,000 options issued to executive director3. 3,298,938 options issued to non-executive directors4. 7,550,000 options issued to employees |
| 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) | <ol style="list-style-type: none">1. Ex price 11.42 cents, ex date 22 October 2021,2. Ex price 11.42 cents, ex date 22 October 2021,3. Ex price 11.42 cents, ex date 22 October 2021,4. Ex price 11.42 cents, ex date 22 October 2021, |

+ See chapter 19 for defined terms.

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4 Do the +securities rank equally in all respects from the +issue date with an existing +class of quoted +securities? 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	Yes, ordinary shares will rank <i>pari passu</i> with existing fully paid ordinary shares on conversion of options
5 Issue price or consideration	nil
6 Purpose of the issue (If issued as consideration for the acquisition of assets, clearly identify those assets)	1. Issue of options to a non-executive director as part consideration for the provision of the Working Capital Loans to the company 2. Issue of options to executive director to vest on the achievement of incentive performance milestones as laid out in Schedule 2 of the company's EGM notice dated 9 September 2019 3. Issue of options to non-executive directors in exchange for forgoing 50% of their respective Director fees for 12 months of \$25,000 4. Issue of options to employees under Employee Share Option Plan to vest on the achievement of incentive performance milestones as laid out in Schedule 2 of the company's EGM notice dated 9 September 2019

+ See chapter 19 for defined terms.

6a	Is the entity an +eligible entity that has obtained security holder approval under rule 7.1A? If Yes, complete sections 6b – 6h in relation to the +securities the subject of this Appendix 3B, and comply with section 6i	Yes
6b	The date the security holder resolution under rule 7.1A was passed	22 November 2018
6c	Number of +securities issued without security holder approval under rule 7.1	Nil
6d	Number of +securities issued with security holder approval under rule 7.1A	Nil
6e	Number of +securities issued with security holder approval under rule 7.3, or another specific security holder approval (specify date of meeting)	Nil
6f	Number of +securities issued under an exception in rule 7.2	29,838,619 options (unlisted)
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	Rule 7.1 – 4,475,793 Rule 7.1A – 5,962,921

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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 timetable in Appendix 7A.

Cross reference: item 33 of Appendix 3B.

22 October 2019

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

Number	⁺ Class
621,611,980	Fully Paid Ordinary Shares

9. Number and ⁺class of all ⁺securities not quoted on ASX (including the ⁺securities in section 2 if applicable)

Number	⁺ Class
266,667 options	Unlisted options to acquire fully paid ordinary shares exercisable at \$0.30 on or before 25 November 2019.
13,231,467 options	Unlisted options to acquire fully paid ordinary shares exercisable at \$0.03 on or before 28 December 2019.
6,666,667 options	Unlisted options to acquire fully paid ordinary shares exercisable at \$0.03 on or before 30 November 2019.
20,000,000 (lead manager options)	Unlisted options to acquire fully paid ordinary shares exercisable at \$0.0332 on or before 28 September 2021.

⁺ See chapter 19 for defined terms.

9	Number and ⁺ class of all ⁺ securities not quoted on ASX (including the ⁺ securities in section 2 if applicable)	18,204,457 (underwriter options)	Unlisted options to acquire fully paid ordinary shares exercisable at \$0.0332 on or before 28 September 2021.
		989,681 options	Unlisted options to acquire fully paid ordinary shares exercisable at \$0.1142 on or before 22 October 2021, vesting on date of issue.
		18,000,000 options	Unlisted options to acquire fully paid ordinary shares exercisable at \$0.1142 on or before 22 October 2021, vesting on the achievement of agreed incentive performance milestones.
		3,298,938 options	Unlisted options to acquire fully paid ordinary shares exercisable at \$0.1142 on or before 22 October 2021, vesting in 12 equal instalments in first 12 months from date of issue.
		7,550,000 options	Unlisted options to acquire fully paid ordinary shares exercisable at \$0.1142 on or before 22 October 2021, vesting on the achievement of agreed incentive performance milestones.

⁺ See chapter 19 for defined terms.

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- | | | |
|----|--|----------------|
| 10 | Dividend policy (in the case of a trust, distribution policy) on the increased capital (interests) | Not applicable |
|----|--|----------------|

Part 2 - Pro rata issue

- | | | |
|----|---------------------------------------|--|
| 11 | Is security holder approval required? | |
|----|---------------------------------------|--|

- | | | |
|----|--|--|
| 12 | Is the issue renounceable or non-renounceable? | |
|----|--|--|

- | | | |
|----|--|--|
| 13 | Ratio in which the ⁺ securities will be offered | |
|----|--|--|

- | | | |
|----|--|--|
| 14 | ⁺ Class of ⁺ securities to which the offer relates | |
|----|--|--|

- | | | |
|----|--|--|
| 15 | ⁺ Record date to determine entitlements | |
|----|--|--|

- | | | |
|----|--|--|
| 16 | Will holdings on different registers (or subregisters) be aggregated for calculating entitlements? | |
|----|--|--|

- | | | |
|----|---|--|
| 17 | Policy for deciding entitlements in relation to fractions | |
|----|---|--|

- | | | |
|----|--|--|
| 18 | Names of countries in which the entity has 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.

- | | | |
|----|--|--|
| 19 | Closing date for receipt of acceptances or renunciations | |
|----|--|--|

- | | | |
|----|---------------------------|--|
| 20 | Names of any underwriters | |
|----|---------------------------|--|

- | | | |
|----|--|--|
| 21 | Amount of any underwriting fee or commission | |
|----|--|--|

⁺ See chapter 19 for defined terms.

22	Names of any brokers to the issue	
23	Fee or commission payable to the broker to the issue	
24	Amount of any handling fee payable to brokers who lodge acceptances or renunciations on behalf of security holders	
25	If the issue is contingent on security holders' approval, the date of the meeting	
26	Date entitlement and acceptance form and offer documents will be sent to persons entitled	
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	
28	Date rights trading will begin (if applicable)	
29	Date rights trading will end (if applicable)	
30	How do security holders sell their entitlements <i>in full</i> through a broker?	
31	How do security holders sell <i>part</i> of their entitlements through a broker and accept for the balance?	
32	How do security holders dispose of their entitlements (except by sale through a broker)?	
33	⁺ Issue date	

+ See chapter 19 for defined terms.

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) ☒ ⁺Securities described in Part 1

(b) ☐ All other ⁺securities

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

35 ☐ If the ⁺securities are ⁺equity securities, the names of the 20 largest holders of the additional ⁺securities, and the number and percentage of 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

⁺ See chapter 19 for defined terms.

Entities that have ticked box 34(b)

38	Number of +securities for which +quotation is sought					
39	+Class of +securities for which quotation is sought					
40	Do the +securities rank equally in all respects from the +issue date with an existing +class of quoted +securities? 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					
41	Reason for request for quotation now Example: In the case of restricted securities, end of restriction period (if issued upon conversion of another +security, clearly identify that other +security)					
42	Number and +class of all +securities quoted on ASX (including the +securities in clause 38)	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">Number</th> <th style="width: 50%;">+Class</th> </tr> </thead> <tbody> <tr> <td style="height: 100px;"></td> <td></td> </tr> </tbody> </table>	Number	+Class		
Number	+Class					

+ See chapter 19 for defined terms.

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:



..... Date: 22 October 2019
(Company secretary)

Print name: Andrew Metcalfe

+ See chapter 19 for defined terms.

Appendix 3B – Annexure 1

Calculation of placement capacity under rule 7.1 and rule 7.1A for eligible entities

Introduced 01/08/12 Amended 04/03/13

Part 1

Rule 7.1 – Issues exceeding 15% of capital	
Step 1: Calculate “A”, the base figure from which the placement capacity is calculated	
Insert number of fully paid +ordinary securities on issue 12 months before the +issue date or date of agreement to issue	363,922,478
Add the following: - Number of fully paid +ordinary securities issued in that 12 month period under an exception in rule 7.2 - Number of fully paid +ordinary securities issued in that 12 month period with shareholder approval - Number of partly paid +ordinary securities that became fully paid in that 12 month period <i>Note:</i> - Include only ordinary securities here – other classes of equity securities cannot be added - Include here (if applicable) the securities the subject of the Appendix 3B to which this form is annexed - It may be useful to set out issues of securities on different dates as separate line items	LR7.2(4) 1,500,001 option exercise 182,044,573 – Rights Issue offer (on or about 28 March 2019 under exception 1 of LR 7.2 22,288,619 options issued under LR7.2 (exception 14) 7,550,000 options issued under LR7.2 (exception 7)
Subtract the number of fully paid +ordinary securities cancelled during that 12 month period	0
“A”	577,305,671

+ See chapter 19 for defined terms.

Step 2: Calculate 15% of “A”	
“B”	0.15 <i>[Note: this value cannot be changed]</i>
Multiply “A” by 0.15	86,595,851
Step 3: Calculate “C”, the amount of placement capacity under rule 7.1 that has already been used	
Insert number of +equity securities issued or agreed to be issued in that 12 month period <i>not counting</i> those issued: • Under an exception in rule 7.2 • Under rule 7.1A • With security holder approval under rule 7.1 or rule 7.4 Note: • <i>This applies to equity securities, unless specifically excluded – not just ordinary securities</i> • <i>Include here (if applicable) the securities the subject of the Appendix 3B to which this form is annexed</i> • <i>It may be useful to set out issues of securities on different dates as separate line items</i>	4,000,000 + 70,144,928 + 7,975,130
“C”	82,120,058
Step 4: Subtract “C” from [“A” x “B”] to calculate remaining placement capacity under rule 7.1	
“A” x 0.15 <i>Note: number must be same as shown in Step 2</i>	86,595,851
Subtract “C” <i>Note: number must be same as shown in Step 3</i>	82,120,058
Total [“A” x 0.15] – “C”	4,475,793 <i>[Note: this is the remaining placement capacity under rule 7.1]</i>

+ See chapter 19 for defined terms.

Part 2

Rule 7.1A – Additional placement capacity for eligible entities	
Step 1: Calculate “A”, the base figure from which the placement capacity is calculated	
“A” <i>Note: number must be same as shown in Step 1 of Part 1</i>	363,922,478
Step 2: Calculate 10% of “A”	
“D”	0.10 <i>Note: this value cannot be changed</i>
Multiply “A” by 0.10	36,392,248
Step 3: Calculate “E”, the amount of placement capacity under rule 7.1A that has already been used	
Insert number of +equity securities issued or agreed to be issued in that 12 month period under rule 7.1A <i>Notes:</i> • <i>This applies to equity securities – not just ordinary securities</i> • <i>Include here – if applicable – the securities the subject of the Appendix 3B to which this form is annexed</i> • <i>Do not include equity securities issued under rule 7.1 (they must be dealt with in Part 1), or for which specific security holder approval has been obtained</i> • <i>It may be useful to set out issues of securities on different dates as separate line items</i>	30,429,327
“E”	30,429,327

+ See chapter 19 for defined terms.

Step 4: Subtract “E” from [“A” x “D”] to calculate remaining placement capacity under rule 7.1A	
“A” x 0.10 <i>Note: number must be same as shown in Step 2</i>	36,392,248
Subtract “E” <i>Note: number must be same as shown in Step 3</i>	30,429,327
Total [“A” x 0.10] – “E”	5,962,921 <i>Note: this is the remaining placement capacity under rule 7.1A</i>

+ See chapter 19 for defined terms.