Securities and Exchange Commission, Washington, D.C. 20549 Schedule 13G Under the Securities Exchange Act of 1934 (Amendment No.\_\_\_)\* (Name of Issuer) : T2 Biosystems Ord (Title of Class of Securities) : Common Stock (CUSIP Number) : 89853L2034 (Date of Event Which Requires Filing of this Statement) : 07/07/2023 Check the appropriate box to designate the rule pursuant to which this Schedule is filed: | Rule 13d?1(b) [X] Rule 13d?1(c) [ ] Rule 13d?1(d) The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter the disclosures provided in a prior cover page. The information required in the remainder of this cover page shall not be deemed to be ?filed? for the purpose of Section 18 of the Securities Exchange Act of 1934 (?Act?) or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes). CUSIP No. 89853L2034 (1) Names of reporting persons: GSA Capital Partners LLP (2) Check the appropriate box if a member of a group (a) (see instructions) (b) (3) SEC use only (4) Citizenship or place of organization : United Kingdom Number of shares beneficially owned by each reporting person with: 4599059 (5) Sole voting power Yes (6) Shared voting power No (7) Sole dispositive power Yes (8) Shared dispositive power No (9) Aggregate amount beneficially owned by each reporting person 4599059 (10) Check if the aggregate amount in Row (9) excludes

- certain shares (see instructions)
- (11) Percent of class represented by amount in Row (9) 1.5%
- (12) Type of reporting person (see instructions): IA

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Special Instructions for Complying With Schedule 13G Under Sections 13(d), 13(g) and 23 of the Securities Exchange Act of 1934 and the rules and regulations thereunder, the Commission is authorized to solicit the information required to be supplied by this schedule by certain security holders of certain issuers.

Disclosure of the information specified in this schedule is mandatory. The information will be used for the primary purpose of determining and disclosing the holdings of certain beneficial owners of certain equity securities. This statement will be made a matter of public record. Therefore, any information given will be available for inspection by any member of the public.

Because of the public nature of the information, the Commission can use it for a variety of purposes, including referral to other governmental authorities or securities selfregulatory organizations for investigatory purposes or in connection with litigation involving the Federal securities laws or other civil, criminal or regulatory statutes or provisions.

Failure to disclose the information requested by this schedule may result in civil or criminal action against the persons

involved for violation of the Federal securities laws and rules promulgated thereunder. Instructions.

- A. Statements filed pursuant to Rule 13d?1(b) containing the information required by this schedule shall be filed not later than February 14 following the calendar year covered by the statement or within the time specified in Rules 13d?1(b)(2) and 13d?2(c). Statements filed pursuant to Rule 13d?1(d) shall be filed within the time specified in Rules 13d?1(c), 13d?2(b) and 13d?2(d). Statements filed pursuant to Rule 13d?1(c) shall be filed not later than February 14 following the calendar year covered by the statement pursuant to Rules 13d?1(d) and 13d?2(b).
- B. Information contained in a form which is required to be filed by rules under section 13(f) (15 U.S.C. 78m(f)) for the same calendar year as that covered by a statement on this schedule may be incorporated by reference in response to any of the items of this schedule. If such information is incorporated by reference in this schedule, copies of the relevant pages of such form shall be filed as an exhibit to this schedule.
- C. The item numbers and captions of the items shall be included but the text of the items is to be omitted. The answers to the items shall be so prepared as to indicate clearly the coverage of the items without referring to the text of the items. Answer every item. If an item is inapplicable or the answer is in the negative, so state. Item 1(a) Name of issuer: T2 Biosystems Ord
- Item 1(b) Address of issuer's principal executive offices: 101
- Hartwell Avenue, Lexington, MA, 02421, United States
- 2(a) Name of person filing: GSA Capital Partners LLP
- 2(b) Address or principal business office or, if none,
- residence: 5 Stratton Street, London, United Kingdom
- 2(c) Citizenship: UK
- 2(d) Title of class of securities: Common Stock
- 2(e) CUSIP No: 89853L203
- Item 3. If this statement is filed pursuant to 240.13d?1(b)
- or 240.13d?2(b) or (c), check whether the person filing is a:
- (a) [ ] Broker or dealer registered under section 15 of the Act (15 U.S.C. 780);
- (b) [ ] Bank as defined in section 3(a)(6) of the Act (15
- U.S.C. 78c); (c) [ ] Insurance company as defined in section 3(a)(19) of the Act (15 U.S.C. 78c);
- (d) [ ] Investment company registered under section 8 of the Investment Company Act of 1940 (15 U.S.C 80a?8);
- (e) [ ] An investment adviser in accordance with 240.13d? 1(b)(1)(ii)(E);
- (f) [ ] An employee benefit plan or endowment fund in accordance with 240.13d?1(b)(1)(ii)(F);
- (g) [ ] A parent holding company or control person in accordance with 240.13d?1(b)(1)(ii)(G);
- (h) [ ] A savings associations as defined in Section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813);
- (i) [ ] A church plan that is excluded from the definition of an investment company under section 3(c)(14) of the Investment Company Act of 1940 (15 U.S.C. 80a?3);
- (j) [ ] A non-U.S. institution in accordance with 240.13d? 1(b)(1)(ii)(J);
- (k)  $\lceil \rceil$  Group, in accordance with 240.13d?1(b)(1)(ii)(K). If filing as a non-U.S. institution in accordance with 240.13d? 1(b)(1)(ii)(J), please specify the type of institution:

Provide the following information regarding the aggregate number and percentage of the class of securities of the issuer identified in Item 1.

- (a) Amount beneficially owned: 4599059
- (b) Percent of class: 1.5%
- (c) Number of shares as to which the person has:
- Sole power to vote or to direct the vote 4599059.
- (ii) Shared power to vote or to direct the vote 0.
- (iii) Sole power to dispose or to direct the disposition of 4599059.
- (iv) Shared power to dispose or to direct the disposition of Θ.
- Instruction. For computations regarding securities which represent a right to acquire an underlying security see 240.13d?3(d)(1).
- Item 5. Ownership of 5 Percent or Less of a Class. If this statement is being filed to report the fact that as of the

Item 4. Ownership

date hereof the reporting person has ceased to be the beneficial owner of more than 5 percent of the class of securities, check the following [].

Instruction. Dissolution of a group requires a response to this item.

Item 6. Ownership of More than 5 Percent on Behalf of Another Person. If any other person is known to have the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, such securities, a statement to that effect should be included in response to this item and, if such interest relates to more than 5 percent of the class, such person should be identified. A listing of the shareholders of an investment company registered under the Investment Company Act of 1940 or the beneficiaries of employee benefit plan, pension fund or endowment fund is not required.

Item 7. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on by the Parent Holding Company or Control Person. If a parent holding company or control person has filed this schedule pursuant to Rule 13d?1(b)(1)(ii)(G), so indicate under Item 3(g) and attach an exhibit stating the identity and the Item 3 classification of the relevant subsidiary. If a parent holding company or control person has filed this schedule pursuant to Rule 13d? 1(c) or Rule 13d?1(d), attach an exhibit stating the identification of the relevant subsidiary.

Item 8. Identification and Classification of Members of the Group

If a group has filed this schedule pursuant to 240.13d? 1(b)(1)(ii)(J), so indicate under Item 3(j) and attach an exhibit stating the identity and Item 3 classification of each member of the group. If a group has filed this schedule pursuant to Rule 13d?1(c) or Rule 13d?1(d), attach an exhibit stating the identity of each member of the group.

Item 9. Notice of Dissolution of Group. Notice of dissolution of a group may be furnished as an exhibit stating the date of the dissolution and that all further filings with respect to transactions in the security reported on will be filed, if required, by members of the group, in their individual capacity. See Item 5.

Item 10. Certifications

- (a) The following certification shall be included if the statement is filed pursuant to 240.13d?1(b): By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were acquired and are held in the ordinary course of business and were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect, other than activities solely in connection with a nomination under 240.14a?11.
- (b) The following certification shall be included if the statement is filed pursuant to 240.13d?1(b)(1)(ii)(J), or if the statement is filed pursuant to 240.13d?1(b)(1)(ii)(K) and a member of the group is a non-U.S. institution eligible to file pursuant to 240.13d?1(b)(1)(ii)(J): By signing below I certify that, to the best of my knowledge and belief, the foreign regulatory scheme applicable to [insert particular category of institutional investor] is substantially comparable to the regulatory scheme applicable

to the functionally equivalent U.S. institution(s). I also undertake to furnish to the Commission staff, upon request, information that would otherwise be disclosed in a Schedule 13D.

(c) The following certification shall be included if the

(c) The following certification shall be included if the statement is filed pursuant to 240.13d?1(c):
By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect, other than activities solely in connection with a nomination under 240.14a?11.
Signature. After reasonable inquiry and to the best of my knowledge and belief. I certify that the information set forth

Signature. After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Dated: 07/28/2023

Signature.

Timothy Kuschill

Name/Title.

General Councel and Chief Compliance Office

General Counsel and Chief Compliance Officer
The original statement shall be signed by each person on whose behalf the statement is filed or his authorized representative. If the statement is signed on behalf of a person by his authorized representative other than an executive officer or general partner of the filing person, evidence of the representative's authority to sign on behalf of such person shall be filed with the statement, Provided, however, That a power of attorney for this purpose which is already on file with the Commission may be incorporated by reference. The name and any title of each person who signs the statement shall be typed or printed beneath his signature.