UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE TO

Tender Offer Statement under Section 14(d)(1) or 13(e)(1)

of the Securities Exchange Act of 1934

VIACELL, INC.

(Name of Subject Company (Issuer))

PERKINELMER, INC. VICTOR ACQUISITION CORP.

(Name of Filing Person (Offerors))

Common Stock, par value \$0.01 per share

(Title of Class of Securities)

92554J105

(CUSIP Number of Class of Securities)

Katherine A. O Hara

Senior Vice President, General Counsel & Secretary

940 Winter Street 02451

Waltham, Massachusetts

(781) 663-6900

(Name, address and telephone number of person authorized to receive

notices and communications on behalf of Filing Persons)

with a copy to:

Hal J. Leibowitz

Wilmer Cutler Pickering Hale and Dorr LLP

60 State Street

Boston, Massachusetts 02109

(617) 526-6000

CALCULATION OF FILING FEE

Transaction Valuation* \$324,453,407

Amount of Filing Fee** \$9,960.72

* Estimated for purposes of calculating the amount of the filing fee only, in accordance with Rule 0-11(d) under the U.S. Securities Exchange Act of 1934, as amended (the Exchange Act). The transaction valuation was calculated by multiplying the offer price of \$7.25 per share by 44,752,194, the number of shares of common stock, par value \$0.01 per share (Shares), of ViaCell, Inc. (ViaCell) outstanding on a fully diluted basis as of October 9, 2007, which Shares consist of (a) 39,194,905 Shares issued and outstanding, (b) 4,253,956 Shares subject to issuance upon exercise of outstanding options, (c) 1,293,333 Shares reserved for future issuance pursuant to outstanding warrants and (d) 10,000 Shares subject to issuance upon exercise of stock options that ViaCell is permitted to grant pursuant to the Merger Agreement.

**	The amount of the filing fee, calculated in accordance with Section 13(e) of the Exchange Act, equals \$30.70 per million dollars of the transaction valuation.	
	Check the box if any part of the fee is offset as provided by Rule 0-11(a)(2) and identify the filing with which the offsetting fee was previously paid. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing.	
	Amount Previously Paid: None. Form or Registration No.: Not applicable.	Filing Party: Not applicable. Date Filed: Not applicable.
 Che	Check the box if the filing relates solely to preliminary communications made before the commencement of a tender offer. Theck the appropriate boxes below to designate any transactions to which the statement relates:	
X	third-party tender offer subject to Rule 14d-1.	
	issuer tender offer subject to Rule 13e-4.	
	going-private transaction subject to Rule 13e-3.	
 Che	amendment to Schedule 13D under Rule 13d-2. ck the following box if the filing is a final amendment reporting the results of the tender offer: "	

This Tender Offer Statement on Schedule TO (this Schedule TO) is filed by PerkinElmer, Inc., a Massachusetts corporation (PerkinElmer), and Victor Acquisition Corp., a Delaware corporation (Offeror) and an indirect wholly owned subsidiary of PerkinElmer. This Schedule TO relates to the offer by Offeror to purchase all of the outstanding shares of common stock, par value \$0.01 per share (the Shares), of ViaCell, Inc., a Delaware corporation (ViaCell), at a price per share of \$7.25, net to the seller in cash, without interest and subject to any required withholdings of taxes, upon the terms and subject to the conditions set forth in the Offer to Purchase dated October 12, 2007 (the Offer to Purchase) and in the related Letter of Transmittal, copies of which are attached to this Schedule TO as Exhibits (a)(1)(A) and (a)(1)(B), respectively (which, together with any amendments or supplements to the Offer to Purchase and the Letter of Transmittal, collectively constitute the Offer). Pursuant to General Instruction F to Schedule TO, the information contained in the Offer to Purchase, including all schedules and annexes to the Offer to Purchase, is hereby expressly incorporated in this Schedule TO by reference in response to items 1 through 11 of this Schedule TO and is supplemented by the information specifically provided for in this Schedule TO. The Agreement and Plan of Merger, dated as of October 1, 2007, among PerkinElmer, the Offeror and ViaCell (the Merger Agreement), a copy of which is attached as Exhibit (d)(1) to this Schedule TO, is incorporated in this Schedule TO by reference.

Item 1. Summary Term Sheet.

The information set forth in the section of the Offer to Purchase entitled Summary Term Sheet is incorporated in this Schedule TO by reference.

Item 2. Subject Company Information.

- (a) The subject company and issuer of the securities subject to the Offer is ViaCell, Inc., a Delaware corporation. Its principal executive office is located at 245 First Street, Fifteenth Floor, Cambridge, Massachusetts 02142 and its telephone number is (617) 914-3400.
- (b) This Schedule TO relates to the Offer by the Offeror to purchase all issued and outstanding Shares for \$7.25 per share, net to the seller in cash, without interest and subject to any required withholdings of taxes, upon the terms and subject to the conditions set forth in the Offer to Purchase and in the related Letter of Transmittal. The information set forth in the introduction to the Offer to Purchase (the Introduction) is incorporated in this Schedule TO by reference.
- (c) The information concerning the principal market in which the Shares are traded and certain high and low sales prices for the Shares in that principal market is set forth in Price Range of the Shares; Dividends in the Offer to Purchase and is incorporated in this Schedule TO by reference.

Item 3. Identity and Background of Filing Person.

(a), (b), (c) The information set forth in the section of the Offer to Purchase entitled Information Concerning PerkinElmer and Offeror and in Schedule I to the Offer to Purchase is incorporated in this Schedule TO by reference.

Item 4. Terms of the Transaction.

(a)(1)(i)-(viii), (x), (xii) The information set forth in the Introduction and in the sections of the Offer to Purchase entitled Terms of the Offer, Acceptance for Payment and Payment for Shares, Procedures for Accepting the Offer and Tendering Shares, Withdrawal Rights, Material U.S Federal Income Tax Consequences, Possible Effects of the Offer on the Market for the Shares; Nasdaq Listing; Exchange Act Registration; Margin Regulations and Conditions of the Offer is incorporated in this Schedule TO by reference.

(a)(1)(ix), (xi) Not applicable.

(a)(2)(i)-(v) and (vii) The information set forth in the sections of the Offer to Purchase entitled Material U.S. Federal Income Tax Consequences, Background of the Offer; Past Contacts or Negotiations with ViaCell and Purpose of the Offer; the Merger Agreement; Statutory Requirements; Appraisal Rights; Going Private Transactions; Plans for ViaCell is incorporated in this Schedule TO by reference.

(a)(2)(vi) Not applicable.

Item 5. Past Contacts, Transactions, Negotiations and Agreements.

(a), (b) The information set forth in the sections of the Offer to Purchase entitled Information Concerning PerkinElmer and Offeror, Background of the Offer; Past Contacts or Negotiations with ViaCell and Purpose of the Offer; the Merger Agreement; Statutory Requirements; Appraisal Rights; Going Private Transactions; Plans for ViaCell is incorporated in this Schedule TO by reference.

Item 6. Purposes of the Transaction and Plans or Proposals.

(a), (c)(1), (c)(3-7) The information set forth in the Introduction and in the sections of the Offer to Purchase entitled Background of the Offer; Past Contacts or Negotiations with ViaCell, Purpose of the Offer; The Merger Agreement; Statutory Requirements; Appraisal Rights; Going Private Transactions; Plans for ViaCell, Dividends and Distributions and Possible Effects of the Offer on the Market for the Shares; Nasdaq Listing; Exchange Act Registration; Margin Regulations is incorporated in this Schedule TO by reference.

(c)(2) None.

Item 7. Source and Amount of Funds or Other Consideration.

(a), (b), (d) The information set forth in the section of the Offer to Purchase entitled Source and Amount of Funds is incorporated in this Schedule TO by reference.

Item 8. Interest in Securities of the Subject Company.

(a), (b) The information set forth in the Introduction and in the sections of the Offer to Purchase entitled Information Concerning PerkinElmer and Offeror, Background of the Offer; Past Contacts or Negotiations with ViaCell, Purpose of the Offer; the Merger Agreement; Statutory Requirements; Appraisal Rights; Going Private Transactions; Plans for ViaCell and in Schedule I to the Offer to Purchase is incorporated in this Schedule TO by reference.

Item 9. Persons/Assets, Retained, Employed, Compensated or Used.

(a) The information set forth in the Introduction and in the section of the Offer to Purchase entitled Fees and Expenses is incorporated in this Schedule TO by reference.

Item 10. Financial Statements.

(a), (b) Not applicable.

Item 11. Additional Information.

(a)(1) The information set forth in the sections of the Offer to Purchase entitled Information Concerning PerkinElmer and Offeror and Purpose of the Offer; the Merger Agreement; Statutory Requirements; Appraisal Rights; Going Private Transactions; Plans for ViaCell is incorporated in this Schedule TO by reference.

(a)(2), (a)(3) The information set forth in the sections of the Offer to Purchase entitled Purpose of the Offer; the Merger Agreement; Statutory Requirements; Appraisal Rights; Going Private Transactions; Plans for ViaCell, Conditions of the Offer and Legal Matters; Required Regulatory Approvals is incorporated in this Schedule TO by reference.

(a)(4) The information set forth in the section of the Offer to Purchase entitled Possible Effects of the Offer on the Market for the Shares; Nasdaq Listing; Exchange Act Registration; Margin Regulations is incorporated in this Schedule TO by reference.

(a)(5) None.

(b) The information set forth in the Offer to Purchase is incorporated in this Schedule TO by reference.

(a)(1)(A)	Offer to Purchase, dated October 12, 2007.
(a)(1)(B)	Form of Letter of Transmittal.
(a)(1)(C)	Form of Notice of Guaranteed Delivery.
(a)(1)(D)	Form of Letter from Georgeson Inc. to Brokers, Dealers, Commercial Banks, Trust Companies and Other Nominees.
(a)(1)(E)	Form of Letter from Brokers, Dealers, Commercial Banks, Trust Companies and Nominees to Clients.
(a)(1)(F)	Form of Guidelines for Certification of Taxpayer Identification Number (TIN) on Substitute Form W-9.
(a)(5)(A)	Joint Press Release Issued by PerkinElmer and ViaCell, dated October 1, 2007, announcing the execution of the Agreement and Plan of Merger among PerkinElmer, Offeror and ViaCell (incorporated in this Schedule TO by reference to the Schedule TO-C filed by PerkinElmer on October 1, 2007).
(a)(5)(B)	Transcript of the Investor Call on October 1, 2007 regarding announcement of the Agreement and Plan of Merger among PerkinElmer, Offeror and ViaCell (incorporated in this Schedule TO by reference to the Schedule TO-C filed by PerkinElmer on October 2, 2007).
(a)(5)(C)	Slides used in the Investor Call on October 1, 2007 (incorporated in this Schedule TO by reference to the Schedule TO-C filed by PerkinElmer on October 2, 2007).
(a)(5)(D)	Slides distributed on October 2, 2007 (incorporated in this Schedule TO by reference to the Schedule TO-C filed by PerkinElmer on October 2, 2007).
(a)(5)(E)	PerkinElmer Announces Plans to Acquire ViaCell Question and Answer Document dated October 5, 2007 (incorporated in this Schedule TO by reference to the Schedule TO-C filed by PerkinElmer on October 5, 2007).
(a)(5)(F)	Form of Summary Advertisement Published in the Wall Street Journal on October 12, 2007.
(a)(5)(G)	Joint Press Release Issued by PerkinElmer and ViaCell, dated October 12, 2007, announcing the commencement of the Offer.
(b)(1)	Credit Agreement, dated as of August 13, 2007, among PerkinElmer, Inc. and Wallac Oy as Borrowers, Bank of America, N.A., as Administrative Agent, Swing Line Lender and L/C Issuer, Citigroup Global Markets Inc. and HSBC Bank USA, National Association, as Co-Syndication Agents, ABN AMRO Bank N.V. and Deutsche Bank Securities Inc., as Co-Documentation Agents, Banc of America Securities LLC and Citigroup Global Markets Inc., as Joint Lead Arrangers and Joint Book Managers, and the Other Lenders party thereto (incorporated in this Schedule TO by reference to the Current Report on Form 8-K filed by PerkinElmer on August 17, 2007).
(d)(1)	Agreement and Plan of Merger, dated as of October 1, 2007, among PerkinElmer, Offeror and ViaCell (incorporated in this Schedule TO by reference to the Current Report on Form 8-K filed by PerkinElmer on October 2, 2007).

Item 13. Information Required by Schedule 13E-3. Not applicable.

Item 12.

Exhibits.

After due 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: October 12, 2007

PERKINELMER, INC.

By: /s/ Katherine A. O Hara Name: Katherine A. O Hara Title: Senior Vice President, General Counsel

and Secretary

VICTOR ACQUISITION CORP.

By: /s/ John L. Healy Name: John L. Healy Title: Secretary

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