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
(Amendment No. 4)

Zynerba Pharmaceuticals, Inc.

(Name of Subject Company (Issuer))

Xylophone Acquisition Corp.

a wholly owned subsidiary of

Harmony Biosciences Holdings, Inc.

(Names of Filing Persons (identifying status as offeror, issuer or other person))

COMMON STOCK, PAR VALUE $0.001 PER SHARE
(Title of Class of Securities)

98986X109
(CUSIP Number of Class of Securities)

Christian Ulrich
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(Name, address, and telephone number of person authorized to receive notices and communications on behalf of filing persons)

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☐ Check the box if the filing relates solely to preliminary communications made before the commencement of a tender offer.

Check the appropriate boxes below to designate any transactions to which the statement relates:
☒ 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.
☐ Amendment to Schedule 13D under Rule 13d-2.

Check the following box if the filing is a final amendment reporting the results of the tender offer: ☐

If applicable, check the appropriate box(es) below to designate the appropriate rule provision(s) relied upon:
☐ Rule 13e-4(i) (Cross-Border Issuer Tender Offer)
☐ Rule 14d-1(d) (Cross-Border Third-Party Tender Offer)

This Amendment No. 4 (this "Amendment") amends and supplements the Tender Offer Statement on Schedule TO (as amended or supplemented from time to time, the "Schedule TO") previously filed by Harmony Biosciences Holdings, Inc., a Delaware corporation ("Parent" or "Harmony") and Xylophone Acquisition Corp. ("Purchaser"), a Delaware corporation and wholly owned subsidiary of Harmony, with the Securities and Exchange Commission (the "SEC") on August 28, 2023, relating to the tender offer by Purchaser to acquire all of the issued and outstanding shares, par value $0.001 per share (the "Shares") of Zynerba Pharmaceuticals, Inc. ("Zynerba") for (i) $1.1059 per Share in cash without interest and subject to deduction for any required withholding under applicable tax law, *plus* (ii) one non-tradable contingent value right ("CVR") per share, which represents the contractual right to receive contingent payments in cash, without interest and subject to deduction for any required withholding under applicable tax law, upon the achievement of certain specified milestones upon the terms and subject to the conditions set forth in the Offer to Purchase (together with any amendments or supplements thereto, the "Offer to Purchase"), and in the accompanying Letter of Transmittal (together with any amendments or supplements thereto and with the Offer to Purchase, the "Offer").

Except as otherwise set forth in this Amendment, the information set forth in the Schedule TO remains unchanged. As permitted by General Instruction F to Schedule TO, the information set forth in the Schedule TO, as amended by this Amendment, including all appendices, schedules, exhibits and annexes thereto, is hereby expressly incorporated by reference herein in response to Items 1-13 of this Amendment. Capitalized terms used but not defined herein have the meanings ascribed to them in the Schedule TO.

Items 1 through 9; and Item 11.

The Offer to Purchase and Items 1 through 9 and Item 11 of the Schedule TO, to the extent such Item incorporates by reference the information contained in the Offer to Purchase, are hereby amended and supplemented to include the following:

The Offer expired at 5:00 p.m., New York City time, on October 10, 2023. The Depositary advised Purchaser that, as of the expiration of the Offer, a total of 28,236,148 Shares were validly tendered and not validly withdrawn, representing approximately 52.3% of the Shares outstanding as of the expiration of the Offer (not including 1,072,940 shares delivered through Notices of Guaranteed Delivery, representing approximately 2.0% of the shares outstanding). As a result, the Minimum Condition has been satisfied.

Parent and Purchaser completed the acquisition of the Company on October 10, 2023, by consummating the Merger pursuant to the Merger Agreement without a vote of the Company shareholders in accordance with Section 251(h) of the DGCL. At the effective time of the Merger, each Share issued and outstanding immediately prior to the Effective Time (other than Shares (i) held in the treasury of Zynerba, (ii) owned by Harmony or Purchaser at the commencement of the Offer, (iii) irrevocably accepted for payment in the Offer, or (iv) that are held by stockholders who are entitled to and properly demand appraisal for such Shares in accordance with Section 262 of the DGCL and who comply in all respects with Section 262 of the DGCL and, as of the Effective Time, have neither effectively withdrawn nor lost their rights to such appraisal and payment under the DGCL), including certain Shares granted pursuant to the Company Equity Plan that were not validly tendered in the Offer, was automatically converted into the right to receive the Offer Price, without interest less any applicable tax withholding.

Following consummation of the Merger, the Shares will be delisted and will cease to trade on The Nasdaq Capital Market. Parent and Purchaser intend to take steps to cause the termination of the registration of the Shares under the Exchange Act and suspend all of the Company's reporting obligations under the Exchange Act as promptly as practicable.

Item 12. Exhibits.

Exhibit No.	
(a)(5)(C)	Press Release issued by Harmony Biosciences Holdings, Inc., dated as of October 11, 2023.*

* Filed herewith.

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.

Date: October 11, 2023

Xylophone Acquisition Corp.

By: /s/ Sandip Kapadia
Name: Sandip Kapadia
Title: Chief Executive Officer

Harmony Biosciences Holdings, Inc.

By: /s/ Sandip Kapadia
Name: Sandip Kapadia
Title: Chief Financial Officer

Exhibit (a)(5)(C)

HARMONY BIOSCIENCES COMPLETES ACQUISITION OF ZYNERBA PHARMACEUTICALS AND EXPANDS PIPELINE

New product in development diversifies portfolio to drive long-term growth

Innovative potential new therapeutic option for rare/orphan neuropsychiatric disorders with high unmet medical needs

Zygel™ in pivotal Phase 3 trial for Fragile X syndrome and has completed Phase 2 proof-of-concept study in 22q11.2 deletion syndrome

PLYMOUTH MEETING, Pa., October 11, 2023 — Harmony Biosciences Holdings, Inc. ("Harmony") (Nasdaq: HRMY), a pharmaceutical company dedicated to developing and commercializing innovative therapies for patients with rare neurological diseases, today announced that it has completed its acquisition of Zynerba Pharmaceuticals, Inc. ("Zynerba") (Nasdaq: ZYNE).

Zynerba is a leader in pharmaceutically produced transdermal cannabinoid therapies for orphan neuropsychiatric disorders. Harmony President & CEO Jeffrey M. Dayno, MD, described its lead candidate, Zygel, as a 'portfolio in a product' with the potential to serve 80,000 U.S. patients who are diagnosed with Fragile X syndrome (FXS) and another 80,000 diagnosed with 22q deletion syndrome (22q).

"Zygel is a significant market opportunity that advances our long-term growth strategy of developing a diversified portfolio beyond sleep/wake therapies," Dayno said. "This acquisition expands our pipeline with a product candidate in our area of expertise that could address high unmet medical needs for people living with rare neuropsychiatric disorders."

Zygel is the first-and-only pharmaceutically manufactured synthetic cannabidiol. It is a non-euphoric cannabinoid formulated as a patent-protected permeation-enhanced gel for transdermal delivery through the skin and into the circulatory system. The product is manufactured through a synthetic process in a cGMP facility and is not extracted from the cannabis plant.

Zygel does not contain THC, the compound that causes the euphoric effect of cannabis, and has the potential to be a nonscheduled product if approved.

Cannabidiol, the active ingredient in Zygel, has been granted orphan drug designation by the United States Food and Drug Administration (FDA) and the European Medicines Agency (EMA) for the treatment of FXS and for the treatment of 22q. Additionally, Zygel has received FDA Fast Track designation for the treatment of behavioral symptoms in patients with FXS.

Harmony's tender offer to acquire all outstanding shares of Zynerba for a purchase price of $1.1059 per share in cash, or $60 million in the aggregate, plus one non-tradeable contingent value right (CVR) per share, representing the right to receive potential additional payments of up to $140 million or approximately $2.5444 in additional cash per share, subject to the achievement of certain clinical, regulatory and sales milestones, expired at 5:00 p.m. New York City time on Tuesday, October 10, 2023. The depositary for the tender offer has advised that, as of the expiration of the tender offer, a total of 28,236,148 shares of Zynerba's common stock were validly tendered and not withdrawn in the tender offer, which represent approximately 52.3% of the total number of shares of Zynerba's outstanding common stock (not including 1,072,940 shares delivered through Notices of Guaranteed Delivery, representing approximately 2.0% of the shares outstanding).

Following the acceptance of the tendered shares, Harmony completed the acquisition of Zynerba through the merger of a wholly owned subsidiary of Harmony with and into Zynerba in which each share of Zynerba's common stock issued and outstanding immediately prior to consummation of the merger (other than shares (a) held in Zynerba's treasury, (b) owned by Harmony at the time the offer commenced, (c) irrevocably accepted for payment in the tender offer or (d) shares held by Zynerba stockholders who properly demanded appraisal for their shares under Delaware law), including shares granted under Zynerba's equity compensation arrangements that were not validly tendered in the tender offer, was converted into the right to receive $1.1059 per share in cash plus one CVR. As a result of the merger, Zynerba became a wholly owned subsidiary of Harmony. The common stock of Zynerba will no longer be listed for trading on the Nasdaq Capital Market.

About Harmony Biosciences

At Harmony Biosciences, we specialize in developing and delivering treatments for rare neurological diseases that others often overlook. We believe that where empathy and innovation meet, a better life can begin for people living with neurological diseases. Established by Paragon Biosciences, LLC, in 2017 and headquartered in Plymouth Meeting, PA, our team of experts from a wide variety of disciplines and experiences is driven by our shared conviction that innovative science translates into therapeutic possibilities for our patients, who are at the heart of everything we do. For more information, please visit www.harmonybiosciences.com.

About Fragile X Syndrome

Fragile X syndrome (FXS) is a rare genetic disorder that is the leading known cause of both inherited intellectual disability and autism spectrum disorder, affecting 1 in 3,600 to 4,000 males and 1 in 4,000 to 6,000 females. The disorder negatively affects synaptic function, plasticity and neuronal connections, and results in a spectrum of intellectual disabilities and behavioral symptoms, such as social avoidance and irritability. There are approximately 80,000 people in the U.S. and approximately 121,000 people in the European Union and UK living with FXS. There is a significant unmet medical need in patients living with FXS as there are currently no FDA approved treatments for this disorder.

FXS is caused by a mutation in FMR1, a gene which modulates a number of systems, including the endocannabinoid system, and most critically, codes for a protein called FMRP. The FMR1 mutation manifests as multiple repeats of a DNA segment, known as the CGG triplet repeat, resulting in deficiency or lack of FMRP. FMRP helps regulate the production of other proteins and plays a role in the development of synapses, which are critical for relaying nerve impulses, and in regulating synaptic plasticity. In people with full mutation of the FMR1 gene, the CGG segment is repeated more than 200 times, and in most cases causes the gene to not function. Methylation of the FMR1 gene also plays a role in determining functionality of the gene. In approximately 60% of patients with FXS, who have complete methylation of the FMR1 gene, no FMRP is produced, resulting in dysregulation of the systems modulated by FMRP.

About 22q11.2 Deletion Syndrome

22q11.2 deletion syndrome (22q) is a disorder caused by a small missing piece of the 22nd chromosome. The deletion occurs near the middle of the chromosome at a location designated q11.2. It is considered a mid-line condition, with physical symptoms including characteristic palate abnormalities, heart defects, immune dysfunction, and esophageal / GI issues, as well as debilitating neuropsychiatric and behavioral symptoms, including anxiety, social withdrawal, ADHD, cognitive impairment and autism spectrum disorder. It is estimated that 22q occurs in one in 4,000 live births, suggesting that there are approximately 80,000 people living with 22q in the U.S. and 129,000 in the European Union and the UK. Patients with 22q deletion syndrome are managed by multidisciplinary care providers, and there are currently no FDA approved treatments for this disorder.

Forward Looking Statements

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. All statements contained in this press release that do not relate to matters of historical fact should be considered forward-looking statements. These forward-looking statements, including as they relate to Harmony and Zynerba, the future development of their technologies and product candidates, including the development of and market opportunities for Zynerba's technology and product candidates, the future value (if any) of the contingent value rights, Harmony's strategy, and the anticipated synergies and benefits from the transaction, are neither promises nor guarantees, but involve known and unknown risks, uncertainties and other important factors that may cause actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Potential risks, uncertainties and other factors to be considered include, among others, problems may arise in successfully integrating the business and technologies of Harmony and Zynerba, and Harmony may not realize the expected benefits of the transaction; the transaction may involve unexpected costs; the businesses may suffer as a result of uncertainty surrounding the transaction, including difficulties in maintaining relationships with third parties or retaining key employees; and no contingent consideration may become payable. For further discussion of these and other risks and uncertainties, see Harmony's and Zynerba's most recent Form 10-K and Form 10-Q filings with the United States Securities and Exchange Commission (the "SEC"), including under the headings "Risk Factors." You are cautioned to not place undue reliance on forward-looking statements, which speak only as of the date of this document. Except as required by law, neither Harmony nor Zynerba is under any duty to update any of the information in this document.

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