Oteseconazole: First Approval

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Abstract

Oteseconazole (VIVJOA™) is an orally administered azole antifungal agent developed by Mycovia Pharmaceuticals for the treatment of fungal infections. It inhibits cytochrome P450 (CYP) 51, thereby affecting the formation and integrity of the fungal cell membrane, but has a low affinity for human CYP enzymes due to its tetrazole metal-binding group. Oteseconazole is the first agent to be approved (in April 2022) for recurrent vulvovaginal candidiasis (RVVC) in the USA, where it is indicated to reduce the incidence of RVVC in females with a history of RVVC who are NOT of reproductive potential. Clinical development for the treatment of onychomycosis, and invasive and opportunistic infections is ongoing. This article summarizes the milestones in the development of oteseconazole leading to this first approval for reducing the incidence of RVVC in females with a history of RVVC who are NOT of reproductive potential.

1 Introduction

Vulvovaginal candidiasis (VVC) is deemed recurrent when a woman experiences ≥ 4 episodes within a 12-month period [1]. The physical symptoms, including discharge, itchiness and pain, are associated with considerable effects on daily living and intimate relationships, with conventional therapy not always successful and commonly involving long-term or multiple treatments. Indeed, a recent Cochrane review determined that while currently recommended oral or topical antifungals may reduce symptomatic clinical recurrences relative to placebo or no treatment, they rarely result in a cure [1].

Oteseconazole (VIVJOA™) is an orally administered azole antifungal agent developed by Mycovia Pharmaceuticals for the treatment of fungal infections [2]. It is the first agent to be approved (in April 2022) for recurrent vulvovaginal candidiasis (RVVC) in the USA, where it is indicated to reduce the incidence of RVVC in females with a history of RVVC who are NOT of reproductive potential [2, 3]. Oteseconazole should be taken with food and the capsules should be swallowed whole [3]. There are two recommended dosage regimens for oteseconazole:

- Oteseconazole-only regimen: 600 mg (as a single dose) on day 1 then 450 mg (as a single dose) on day 2 and then 150 mg once weekly for 11 weeks starting on day 14 (weeks 2–12) [total regimen duration of 12 weeks].
- Fluconazole/oteseconazole regimen: oral fluconazole 150 mg on days 1, 4 and 7; oteseconazole 150 mg once
daily for 7 days on days 14–20 then 150 mg once weekly for 11 weeks starting on day 28 (weeks 4 through 14) [total regimen duration of 14 weeks].

The use of oteseconazole is contraindicated in females of reproductive potential, and pregnant and lactating women because of potential risks to a foetus or breastfed infant, and is not recommended in patients with moderate or severe hepatic impairment (Child–Pugh B–C), severe renal impairment [estimated glomerular filtration rate (eGFR) 15–29 mL/min] or end-stage renal disease (eGFR < 15 mL/min) with or without dialysis owing to a lack of data [3].

Oteseconazole is undergoing clinical development for the treatment of onychomycosis, and invasive and opportunistic infections; the clinical development of oteseconazole for the treatment of tinea pedis has been discontinued.

1.1 Company Agreements

In June 2019, Mycovia Pharmaceuticals and Jiangsu Hengrui Medicine entered into an exclusive agreement to develop and commercialize oteseconazole in China, Hong Kong, Macau and Taiwan for the treatment or prevention of RVVC and other fungal conditions (e.g., onychomycosis and invasive fungal infections) [4]. Under the terms of the agreement, Mycovia is eligible to receive development funding, regulatory milestones, sales milestones and royalties on net sales of oteseconazole in China [4].

In October 2019, Mycovia and Gedeon Richter entered into an exclusive licensing, development and technology transfer agreement to commercialize and manufacture oteseconazole in Europe, Latin America, Australia, Russia and other Commonwealth of Independent States countries for the treatment of RVVC [5]. Under the terms of this agreement, Mycovia is eligible to receive milestone payments relating to the clinical, regulatory and commercial success of oteseconazole [5].

2 Scientific Summary

2.1 Pharmacodynamics

Oteseconazole is an azole metalloenzyme inhibitor that targets fungal sterol 14α demethylase [cytochrome P450 (CYP) 51 (CYP51)] [3]. Inhibiting CYP51 (an enzyme involved in the biosynthesis of ergosterol, which is required for the formation and integrity of the fungal cell membrane) results in the accumulation of 14-methylated sterols, some of which are toxic to fungi [3]. In Candida albicans cellular assays, oteseconazole potently [dissociation constant (Kd) of \( \leq 0.039 \) \( \mu \)mol/L] bound to CYP51 with an affinity generally similar to that of other azole antifungals, including fluconazole (Kd of 0.056 \( \mu \)mol/L), inhibiting CYP51 activity in a manner consistent with tight-binding inhibition; an oteseconazole concentration of 0.076 \( \mu \)mol/L resulted in the almost complete inhibition of the ergosterol biosynthesis pathway [6]. In contrast, an oteseconazole concentration of 86 \( \mu \)mol/L did not result in the binding of human CYP51, nor did a concentration of 50 \( \mu \)mol/L inhibit human CYP51.
activity, with oteseconazole only weakly (≥ 65 µmol/L) inhibiting the activity of human CYP2CP, CYP2C19 and CYP3A4 [6]. The lower affinity of oteseconazole for human CYP enzymes is attributable to its tetrazole metal-binding group [3].

In vitro, oteseconazole has displayed activity against most isolates of the following RVVC-associated microorganisms: C. albicans, C. dubliniensis, C. glabrata, C. krusei, C. lusitaniae, C. parapsilosis and C. tropicalis [3]. It inhibited Candida spp. (1910 isolates, mostly C. albicans) collected from women participating in three phase III studies (see Sect. 2.3) with a minimum inhibitory concentration (MIC) of ≤ 0.0005 to > 0.25 µg/mL [MIC required to inhibit the growth of 90% of isolates (MIC90) of 0.06 µg/mL]; MIC values of 0.002 to > 0.25 µg/mL (0.125 µg/mL) were displayed against the C. glabrata and C. dubliniensis at both 1 and 4 days following treatment [9].

Susceptibility to oteseconazole is affected by CYP51 overexpression, mutations in the active site of CYP51 (which affect interaction with the tertiary alcohol of the agent) and ATP-binding cassette and major facilitator superfamily drug efflux pumps [10]. While increases in oteseconazole MIC values were associated with the upregulation of the efflux pumps CDR1, MDR1 CYP51 in vitro, oteseconazole maintained meaningful in vitro activity against certain fluconazole-resistant Candida clinical isolates [3]. It demonstrated potent activity (geometric mean MIC of ≤ 0.15 µg/mL; MIC90 of 1 µg/mL) against C. albicans [68 isolates, of which 57 were fluconazole-resistant (≥ 8 µg/mL) and possessed multiple knownazole resistance mechanisms] [11] and inhibited 8 of 10 fluconazole-resistant (MIC of 2–64 µg/mL) C. albicans isolates from patients with VVC with an MIC of ≤ 0.015 µg/mL (the lowest concentration tested) [9]. Oteseconazole demonstrated in vitro activity against C. glabrata and C. krusei (34 and 50 clinical isolates resistant to ≥ 1 standard antifungal compound) that was at least fivefold below achievable human plasma levels (geometric mean MIC of 0.16 µg/mL; MIC90 of ≤ 1 µg/mL) [12] and against fluconazole-resistant (MIC of ≥ 64 µg/mL) C. glabrata (seven clinical isolates) [MIC of 2 µg/mL] [13].

Oteseconazole had no clinically relevant effect on the QT interval at up to fivefold the maximum exposure achieved with the approved dose [3].

### 2.2 Pharmacokinetics

Administering oteseconazole with a high-fat, high-calorie meal increased its exposure [maximum concentration (Cmax) and the area under the concentration–time curve (AUC) from 0 to 72 h values increased by 45% and 36%]; thus, oteseconazole should be administered with food (Sect. 1) [3]. Peak plasma concentrations of oteseconazole are reached in ≈ 5–10 h; over a 20 mg to 320 mg dose range, its AUC is increased approximately dose proportionally and its Cmax is increased less than dose proportionally. Oteseconazole is 99.5–99.7% bound to plasma proteins; in vivo, oteseconazole has a comparable exposure in vaginal tissues to that in plasma [3].

Oteseconazole does not undergo significant metabolism; its median terminal half-life is ≈ 138 days [3]. Approximately 56% of an orally administered dose of radiolabeled oteseconazole was recovered in faeces (predominantly via biliary excretion) and 26% was recovered in urine [3].

Sex, race/ethnicity, or mild to moderate renal impairment had no clinically relevant effect on the pharmacokinetics of oteseconazole [3].

Based on in vitro data, oteseconazole may be coadministered without dosage adjustments with CYP450 isoenzyme inducers and inhibitors (owing to its stability in human liver microsomes) and with P-gp, BCRP, OATP1B1, OATP1B3, OCT2, OAT1 and OAT3 inhibitors [14]. Given that oteseconazole did not impact the metabolism of substrates for these CYP450 isoenzymes nor inhibit these cell membrane transporters at clinically relevant concentrations, it is considered unlikely that it would impact the pharmacokinetics of concomitant medications that are substrates of either major CYP450 enzymes (i.e. CYP1A2, CYP2B6, CYP2C8, CYP2C9, CYP2C19 and CYP2D6) or major cell membrane transporters (i.e. P-gp, OATP1B1, OATP1B3, OCT2, OAT1 and OAT3) [14]. Indeed, in clinical drug interaction studies, the pharmacokinetics of midazolam (a sensitive CYP3A4 substrate), ethinylestradiol (a CYP3A4 substrate), norethindrone (a CYP3A4 substrate) and digoxin (a P-gp substrate) were not affected to a clinically relevant extent when coadministered with oteseconazole [3]. However, in another clinical drug interaction study, Cmax and AUC from time 0 to 24 h values for rosvuvastatin (a BCRP substrate) were increased by 118% and 114% when rosvuvastatin was coadministered with oteseconazole. Thus, in patients receiving oteseconazole, the lowest possible starting dose of the BCRP substrate should be used or consideration given to lowering the dose of the BCRP substrate [3].
Features and properties of oteseconazole

| Alternative names | VIVJOA; SHR-8008; VT-1161 |
|------------------|--------------------------|
| Class            | Antifungals; foot disorder therapies; pyridines; small molecules; tetrazoles |
| Mechanism of action | 14-alpha demethylase inhibitors |
| Route of administration | Oral |
| Pharmacodynamics | Minimum inhibitory concentration required to inhibit the growth of 90% of isolates of 0.06 µg/mL against *Candida* spp. (mostly *C. albicans*; 1910 clinical isolates) and 0.125 µg/mL against *C. glabrata* clinical isolates |
| Pharmacokinetics | Administer with food; peak plasma concentration reached in ≈ 5–10 h; median terminal half-life of ≈ 138 days |
| Most frequent adverse events | Headache, nausea |
| ATC codes | WHO ATC code J02A-C06 (Oteseconazole) |
|            | EphMRA ATC code J2A (Systemic Agents for Fungal Infections) |
| Chemical name | 
|               | (2R)-2-(2,4-difluorophenyl)-1,1-difluoro-3-(tetrazol-1-yl)-1-[5-[4-(2,2,2-trifluoroethoxy)phenyl]pyridin-2-yl] propan-2-ol |

2.3 Therapeutic Trials

2.3.1 Recurrent Vulvovaginal Candidiasis

Oral oteseconazole was superior to placebo in preventing the recurrence of acute VVC episodes in 656 adult and post-menarchal paediatric females with RVVC (defined as ≥ 3 acute VVC episodes in a 12-month period) participating in two identically designed, randomized, double-blind, multinational, phase III studies (VIOLET; NCT03562156 and NCT03561701) [3, 15]. Patients in the VIOLET studies initially received fluconazole 150 mg every 3 days (i.e. on days 1, 4 and 7) to treat the presenting acute infection (induction period). Those who had achieved resolution (defined as a vulvovaginal signs and symptoms score of < 3) 14 days after the first dose of fluconazole were randomized to receive oteseconazole 150 mg once daily for 7 days then oteseconazole 150 mg once weekly for 11 weeks, or placebo for 12 weeks (maintenance period). Patients were then followed for 36 weeks (follow-up period) [3, 15]. If clinically needed, patients experiencing an acute VVC episode [i.e. vulvovaginal signs and symptoms score of ≥ 3 and a positive potassium hydroxide (KOH) test] during the study were permitted to receive treatment [3].

The proportion of patients with ≥ 1 culture-verified acute VVC episode at week 48 (primary efficacy endpoint) was significantly (*p* < 0.001) lower in patients receiving the oteseconazole regimen than in those receiving placebo in both studies (NCT03562156: 6.7% of 217 vs 42.8% of 109 patients; NCT03561701: 3.9% of 218 vs 39.4% of 108 patients) [3]. The superiority of oteseconazole over placebo was also seen in the proportion of patients with ≥ 1 culture-verified acute VVC episode or who had received medication known to treat VVC during the maintenance and follow-up periods (NCT03562156: 27.3% vs 50.8%; NCT03561701: 21.3% vs 49.7%; both *p* < 0.001) [3].

Patients eligible for the VIOLET studies had a vulvovaginal signs and symptoms score of ≥ 3 and a positive KOH test [15]. In both studies, ≥ 1 culture-verified acute VVC episode was defined as a positive fungal culture for *Candida* spp. associated with a vulvovaginal signs and symptoms score of ≥ 3 [3]. Vulvovaginal signs and symptoms included burning, irritation, itching, redness, skin picking and swelling [3]. Subject compliance was high throughout the VIOLET studies [15].

The findings of the two VIOLET studies are supported by efficacy data from 219 adult and post-menarchal paediatric females with RVVC (defined as ≥ 3 acute VVC episodes in a 12-month period) participating in a randomized, double-blind, multicentre, phase III study (ultraVIOLET; NCT03840616) [3, 16]. Patients in ultraVIOLET initially received oteseconazole (600 mg on day 1 and 450 mg on day 2) or fluconazole [150 mg every 3 days (i.e. on days 1, 4 and 7)] to treat the presenting acute infection (induction period). Those who had achieved resolution (defined as a vulvovaginal signs and symptoms score of < 3) 14 days after the first dose of oteseconazole or fluconazole then received oteseconazole 150 mg once weekly for 11 weeks, or placebo, respectively, for 11 weeks (maintenance period). Patients were then followed for 37 weeks (follow-up period) [3, 16].

Oteseconazole was noninferior to fluconazole in the proportion of patients with resolved acute VVC infections at day 14 (93.2% vs 95.8% of patients), with the oteseconazole
regimen superior ($p < 0.001$) to the fluconazole/placebo regimen in the proportion of patients with ≥1 culture-verified acute VVC episode during the maintenance period (i.e. post-randomization through week 50) or who had failed to clear their infection during the induction period (10.3% of 147 vs 42.9% of 72 patients) [3, 16]. The superiority of the oteseconazole regimen over the fluconazole/placebo regimen was also seen in the proportion of patients with ≥1 culture-verified acute VVC episode or who had received medication known to treat VVC during the maintenance period (post-randomization through week 50) or who had failed to clear their infection during the induction period (43.5% vs 59.0%; $p = 0.039$) [3]. The average proportion of patients with ≥1 culture-verified acute VVC episode through week 50 was 5.1% in the oteseconazole regimen group and 42.2% in the fluconazole/placebo regimen group [16].

Patients eligible for ultraVIOLET had a vulvovaginal signs and symptoms score of ≥3 and a positive KOH test identifying Candida spp. [16]. A recurring acute VVC episode was defined as a positive culture for Candida spp. and a vulvovaginal signs and symptoms score of ≥3 [3]. Vulvovaginal signs and symptoms included burning, irritation, itching, redness, skin picking and swelling [3].

Promising efficacy with oral oteseconazole was demonstrated in a randomized, double-blind, placebo-controlled, multicentre, phase II dose-ranging study (REVIVE; NCT02267382) in 215 adult females with RVVC (defined as ≥3 acute VVC episodes in a 12-month period) [17]. Patients in REVIVE initially received fluconazole 150 mg every 3 days (i.e. on days 1, 4 and 7) to treat the presenting acute infection (induction period). Those who had achieved resolution (defined as a vulvovaginal signs and symptoms score of <3) 14 days after the first dose of fluconazole were randomized to receive one of the following five regimens: oteseconazole 150 mg once daily for 7 days, then 150 mg once weekly for 11 weeks and then placebo once weekly for 12 weeks; oteseconazole 300 mg once daily for 7 days, then 300 mg once weekly for 11 weeks and then placebo once weekly for 12 weeks; oteseconazole 150 mg once daily for 7 days, then 150 mg once weekly for 23 weeks; oteseconazole 300 mg once daily for 7 days, then 300 mg once weekly for 23 weeks; or placebo for 24 weeks [17].

The likelihood of achieving ≥1 culture-verified episode of acute VVC through week 48 (primary efficacy endpoint) was significantly ($p < 0.0001$) lower in all of the oteseconazole groups (oteseconazole 150 mg for 12 weeks, oteseconazole 150 mg for 24 weeks, oteseconazole 300 mg for 12 weeks and oteseconazole 300 mg for 24 weeks, respectively; $n = 42, 43, 43$ and 41) than the placebo group ($n = 46$) [4.8%, 7.0%, 0% and 4.9% vs 52.2%; odds ratios of 0.0308, 0.0414, 0.0000 and 0.0438] (ITT population) [17]. Only 7 patients across the oteseconazole groups (vs 24 patients in the placebo group) had a culture-verified recurrence; the median time to first recurrence of culture-verified acute VVC was not reached in any of the oteseconazole groups (owing to the low number of recurrences) and was 28 weeks in the placebo group (ITT population) [17].

Patients eligible for REVIVE had a vulvovaginal signs and symptoms score of ≥3 [symptoms (burning, irritation and itching) and signs (redness, skin picking and swelling) were each assessed on a 0 (none) to 3 (severe) scale] and a positive KOH test for Candida spp. At screening, most (93.5%) isolates were C. albicans [17].

2.3.2 Acute Vulvovaginal Candidiasis

Oral oteseconazole demonstrated efficacy in adult females with a clinical diagnosis of symptomatic acute VVC and a positive baseline KOH test participating in a randomized, double-blind, multicentre, phase II dose-ranging study (NCT01891331) [18]. Therapeutic cure (defined as both clinical and mycological cure) at day 28 was achieved by 75.0% of 8 patients receiving oteseconazole 300 mg once daily for 3 days, 85.7% of 7 patients receiving oteseconazole 600 mg once daily for 3 days, 78.6% of 14 patients receiving oteseconazole 600 mg twice daily for 3 days and 62.5% of 8 patients receiving a single dose of fluconazole 150 mg [per-protocol (PP) population]. At 3 and 6 months, there was evidence of mycological recurrence in 0% and 0% of the patients in the oteseconazole groups and in 28.5% and 46.1% of patients in the fluconazole group [18].

Clinical cure was defined as the complete resolution of signs and symptoms pertaining to VVC, with any new sign or symptom observed at day 28 determined (by the investigator) not to be related to VVC; mycological cure was defined as a negative fungal culture for Candida spp. [18].

2.3.3 Onychomycosis

Therapy with oral oteseconazole (300 or 600 mg for 12 or 24 weeks) was associated with high nail clearance rates in 259 adults with moderate-to-severe distal and lateral subungual onychomycosis of the toenail participating in a 60-week, randomized, double-blind, placebo-controlled, multicentre, phase II study (RENOVATE; NCT02267356) [19]. RENOVATE consisted of a loading period, a treatment period and a follow-up period. Patients received oteseconazole 300 or 600 mg once daily or placebo for 2 weeks during the loading period; then oteseconazole 300 mg once weekly for 10 or 22 weeks, oteseconazole 600 mg once weekly for 10 or 22 weeks, or placebo during the treatment period (with the dose during the treatment period the same as that administered during the loading period). Patients were then followed-up for 36 weeks [19].

The proportion of patients achieving a complete cure of the target toenail (TGT; i.e. the most affected large toenail) at
week 48 (primary efficacy endpoint) was significantly greater ($p < 0.001$) in each of the four oteseconazole groups than the placebo group in both the intent-to-treat (ITT) and PP populations [19]. For instance, in the ITT population, 32% of 53 patients in the oteseconazole 300 mg for 12 weeks’ group, 36% of 53 patients in the oteseconazole 300 mg for 24 weeks’ group, 42% of 52 patients in the oteseconazole 600 mg for 12 weeks’ group, 33% of 54 patients in the oteseconazole 600 mg for 24 weeks’ group and 0% of 47 patients in the placebo group achieved a complete cure at week 48. Further improvements in complete cure rates are expected with longer follow-up periods owing to additional clear nail growth. Indeed, at week 60 (i.e. 36–48 weeks after the end of treatment), a complete cure had been achieved by 45% of patients in the oteseconazole 300 mg for 12 weeks’ group, 43% of patients in the oteseconazole 300 mg for 24 weeks’ group, 42% of patients in the oteseconazole 600 mg for 12 weeks’ group, 41% of patients in the oteseconazole 600 mg for 24 weeks’ group and 0% of patients in the placebo group ($p < 0.001$ for each of the four oteseconazole groups vs placebo) [ITT population] [19].

Patients eligible for RENOVATE had a clinical diagnosis of moderate-to-severe distal and lateral subungual onychomycosis of $\geq 1$ great toenail that affected $\geq 25\%$ to $\leq 75\%$ of the TGT and had been confirmed by positive baseline KOH microscopy and dermatophyte culture [19]. The TGT needed to be $\leq 3$ mm thick at the distal end and have $\geq 2$ mm of clear nail from the proximal nail fold. Complete cure of the TGT was defined as both clinical cure (i.e. 0% nail involvement, Investigator’s Global Assessment score of 0) and mycological cure (i.e. negative KOH and negative dermatophyte culture) at week 48. Isolated in 96% of patients, *Trichophyton rubrum* was the most frequently occurring dermatophyte observed in RENOVATE. Mean nail involvement was 45.8% [19].

### 2.4 Adverse Events

Therapy with oral oteseconazole was well tolerated in adult and/or post-menarchal paediatric females with RVVC [15–17], adult females with acute VVC [18] and adult males and females with onychomycosis of the toenail [19].

In adult and/or post-menarchal paediatric females with RVVC [15–17], the proportions of patients with $\geq 1$ treatment-emergent adverse event (AE) were generally similar between the oteseconazole and placebo groups. Most treatment-emergent AEs were mild to moderate in severity, and no treatment-related serious AEs or effects on liver function or the QT interval were reported [15–17]. In a pooled analysis ($n = 580$) of the phase III VIOLET and ultraVIOLET studies, the most frequently reported adverse reactions (incidence of $> 2\%$) with oteseconazole therapy were headache (includes headache, migraines and sinus headaches; 7.4% of patients) and nausea (3.6%) [3]. Allergic dermatitis was the adverse reaction that resulted in one (0.2%) oteseconazole recipient discontinuing treatment. Serious adverse reactions and adverse reactions resulting in treatment discontinuation were reported in a similar proportion of patients in the oteseconazole and comparator groups [3].

In adults with moderate-to-severe distal and lateral subungual onychomycosis of the toenail, oteseconazole demonstrated a safety profile generally similar to that of placebo [19]. Most AEs were transient, mild to moderate in severity and considered to be unrelated to the study drug. The most frequently reported treatment-emergent AEs included ingrown toenail, dermatitis, headache and cough. There were no treatment-related serious AEs observed in any of the treatment groups in RENOVATE and no evidence of an effect on liver function or the QT interval [19].

### Key clinical trials of oteseconazole

| Drug(s) | Indication | Phase | Status | Location | Identifier | Sponsor |
|---------|------------|-------|--------|----------|------------|---------|
| Oteseconazole, fluconazole, placebo | Recurrent vulvovaginal candidiasis | III | Completed | USA | NCT03840616 (ultraVIOLET) | Mycovia Pharmaceuticals |
| Oteseconazole, placebo | Recurrent vulvovaginal candidiasis | III | Completed | Multinational | NCT03561701 (VIOLET) | Mycovia Pharmaceuticals |
| Oteseconazole, placebo | Recurrent vulvovaginal candidiasis | III | Completed | Multinational | NCT03562156 (VIOLET) | Mycovia Pharmaceuticals |
| Oteseconazole, fluconazole | Acute vulvovaginal candidiasis | III | Completed | China | NCT04956419 | Jiangsu Hengrui Medicine Co. |
| Oteseconazole, fluconazole | Recurrent vulvovaginal candidiasis | III | Recruiting | China | NCT05074602 | Jiangsu Hengrui Medicine Co. |
| Oteseconazole, placebo | Onychomycosis | II | Completed | USA | NCT02267356 (RENOVATE) | Viamet Pharmaceuticals |
| Oteseconazole, placebo | Recurrent vulvovaginal candidiasis | II | Completed | USA | NCT02267382 (REVIVE) | Viamet Pharmaceuticals |
| Oteseconazole, fluconazole | Acute vulvovaginal candidiasis | II | Completed | USA | NCT01891331 | Viamet Pharmaceuticals |
2.5 Ongoing Clinical Trials

Extensions of the two multinational phase III VIOLET studies have been initiated [20]. All of the US sites who partook in the VIOLET studies will have the option to participate in the 48-week extension studies, which will be open to patients who remain disease-free at the conclusion of the initial 48-week period [20].

A randomized, double-blind, active-controlled, multicentre, phase III study (NCT05074602) is currently evaluating oteseconazole for the treatment of RVVC in China.

3 Current Status

Oteseconazole received its first approval on 28 April 2022 to reduce the incidence of RVVC in females with a history of RVVC who are NOT of reproductive potential in the USA [2, 3].

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Declarations

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Ethics approval, Consent to participate, Consent to publish, Availability of data and material, Code availability Not applicable.

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