# Addressing postnatal depression: disparities in treatment availability

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## Introduction

Postnatal depression (PND) is a serious and potentially life-threatening maternal mental health condition where sudden fluctuations in reproductive hormones trigger affective dysregulation in women and contribute to PND onset.<sup>1</sup>

It is linked to negative outcomes for both mothers and infants, impacting the personal development of mothers and optimal child development.

Despite being treatable by psychological and medical treatments, it remains underdiagnosed and undertreated partially because of the social stigma around PND, affecting up to 17% puerperal women globally.<sup>1-5</sup>

The current treatments for PND, including tricyclic antidepressants (TCAs), selective serotonin reuptake inhibitors (SSRIs), and serotonin-norepinephrine reuptake inhibitors (SNRIs), are primarily indicated for major depressive disorder but have been used for PND due to their perceived effectiveness.

The aim of this research was to understand the current and future treatment landscape for PND.

## Methods

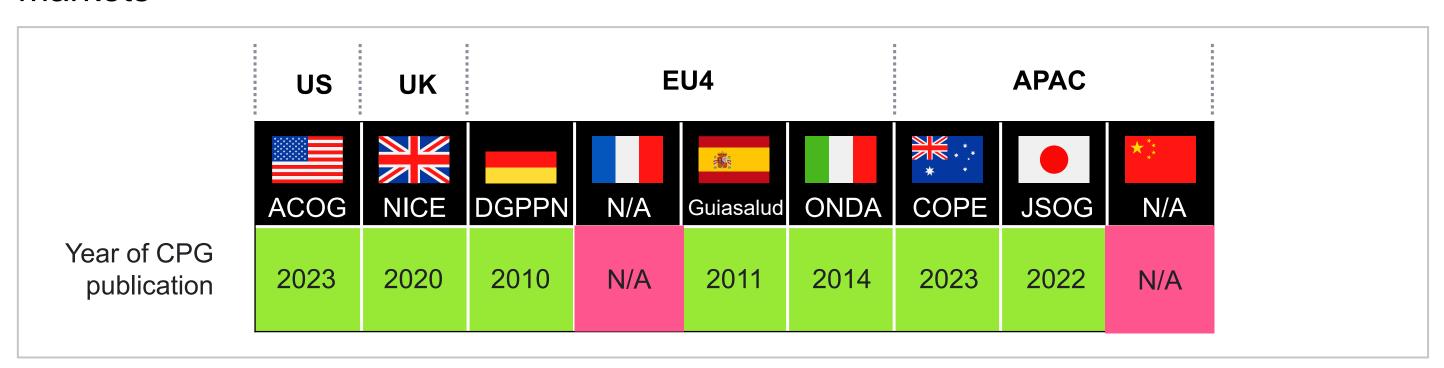
In assessing the current treatment landscape, we searched for national clinical guidelines for PND in the US, UK, EU4, China, Japan, and Australia, as well as the documents from regulatory bodies (Food and Drug Administration [FDA], Medicines and Healthcare products Regulatory Agency [MHRA], European Medicines Agency [EMA], National Medical Products Administration [NMPA], Pharmaceuticals and Medical Devices Agency [PMDA], and Therapeutic Goods Administration [TGA]).

Trials were identified from ClinicalTrials.gov using the terms "postnatal depression" and "postpartum depression" to gain insights into the future treatment landscape. Phase 3 trials of the efficacy of pharmacotherapies for PND were included, whereas trials focusing exclusively on assessing the safety, tolerability, or pharmacokinetics of pharmacotherapies, or those addressing all three aspects, were excluded.

## Results

National clinical guidelines were available in the US, UK, Germany, Italy, Spain, Japan, and Australia but were absent in France as shown in Table 1.6-10 However, only regional perinatal clinical practice guideline for PND is found in China and therefore was excluded in this research as it was not available nationally.

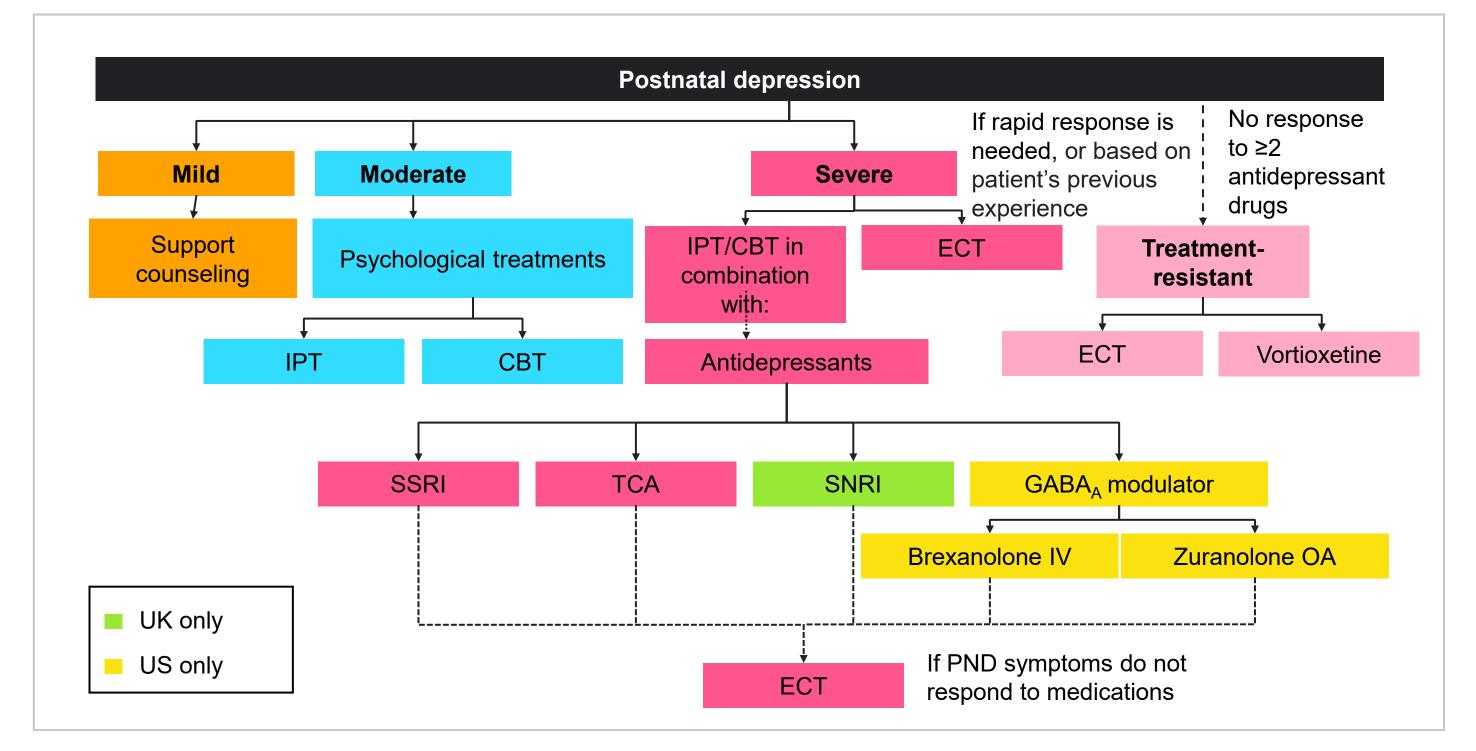
Table 1: Availability of national clinical practice guidelines (CPGs) within the scope markets



Recommended treatments for PND are largely aligned among countries and encompass short-term psychological interventions such as cognitive behavioral therapy (CBT) and pharmacotherapy including TCAs, SSRIs, and SNRIs.

The choice of treatment is dependent on the severity of mental health condition. The medical professionals in countries like Spain and the UK use diagnostic tools such as the Edinburgh Postnatal Depression Scale, Patient Health Questionnaire, or the 7-item Generalized Anxiety Disorder scale as part of the full postnatal assessment.<sup>11,12</sup>

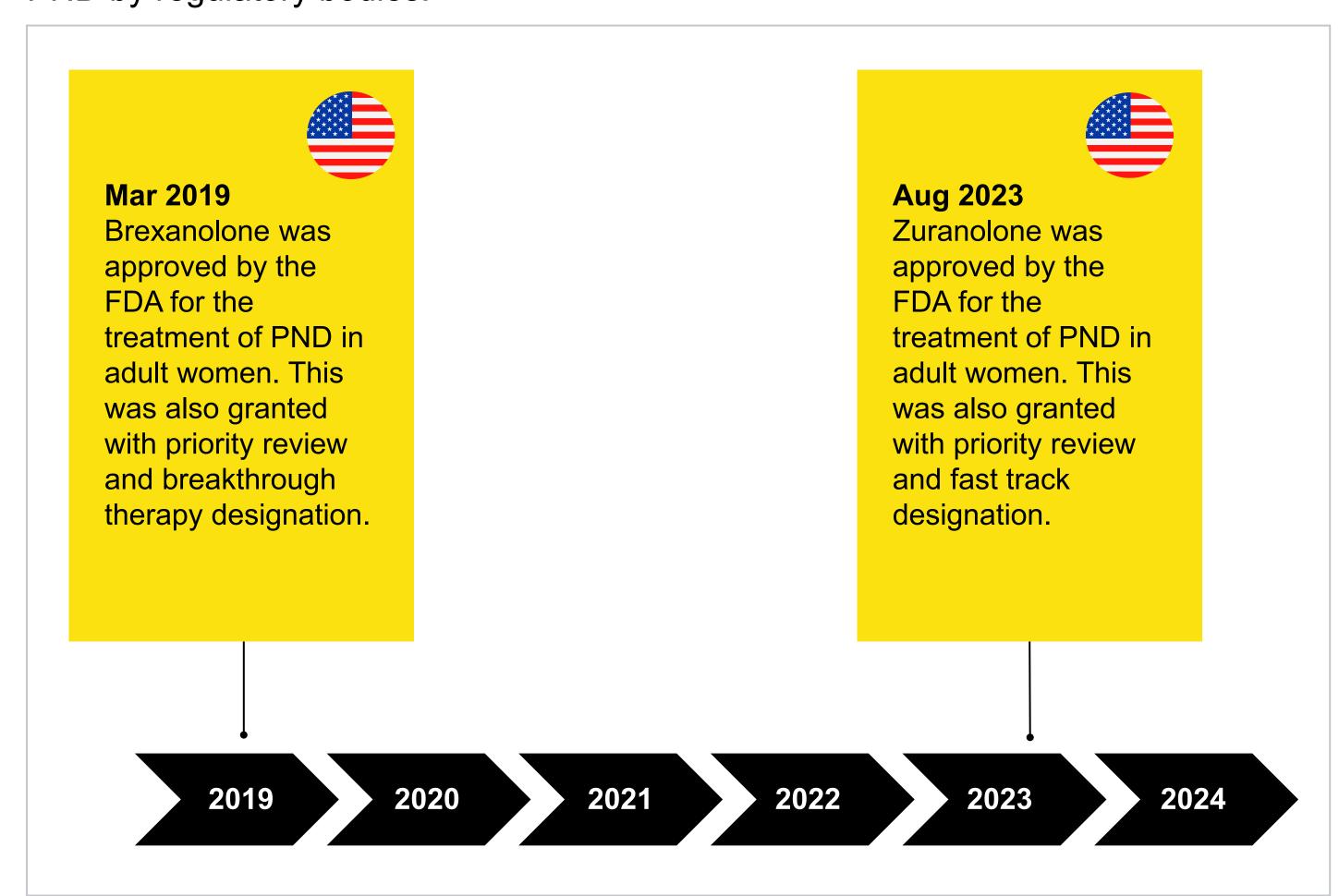
Figure 1: Flowchart showcasing the list of treatments available according to the severity of PND in postnatal women



Second-generation antidepressants such as SSRIs and SNRIs are preferred over TCAs for depression due to fewer side effects and lower overdose risk; however, all may increase suicidal thoughts in young adults. Brexanolone and zuranolone are the only approved treatments for PND with no comparative efficacy data available.

The US ACOG recommends exploring novel therapies such as intravenous brexanolone and oral zuranolone for severe PND.<sup>13</sup> Although brexanolone and zuranolone received FDA approval in 2019 and 2023, respectively, with various designations shown in Figure 2 to address the need for rapid-onset treatments, these therapies have not obtained approval from the MHRA, EMA, TGA, NMPA, and PMDA, and therefore, no health technology assessment documents were found for the European and APAC regions.<sup>14-16</sup>

Figure 2: Timeline for the approval of brexanolone and zuranolone in the treatment of PND by regulatory bodies.



Major safety concerns following the launch of brexanolone and zuranolone include a boxed warning about impaired ability to drive or perform hazardous activities, and the need for women receiving brexanolone to be monitored and accompanied during interactions with their child(ren) at the healthcare facility due to the risk of sudden loss of consciousness.

Despite remaining unmet need in PND, there appear to be no novel therapies in development in the near future.

#### Conclusions

Women's health remains significantly under-researched, contributing to global disparities in PND management. In most countries, access to innovative treatments is limited due to the lack of policies, advocacy, and clinical trials. Severe side effects associated with brexanolone and zuranolone emphasize the urgent need to develop newer therapies with improved safety profiles. Strengthening policy frameworks and research efforts is essential to improve PND treatment outcomes, better understand the safety and efficacy of new drug classes, and address the unmet needs of women and their infants globally.

CBT, cognitive behavioral therapy; ECT, electroconvulsive therapy; GABA<sub>A</sub>, gamma-aminobutyric acid type A; IPT, interpersonal therapy; IV, intravenous; OA, oral administration; PND, postnatal depression; SSRI, selective serotonin reuptake inhibitors; SNRI, serotonin-norepinephrine reuptake inhibitors; TCA, tricyclic antidepressants