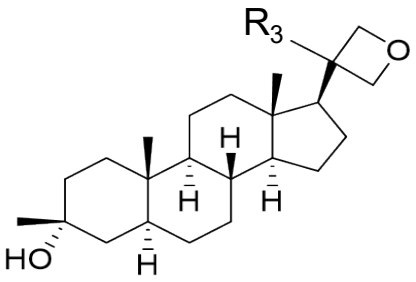
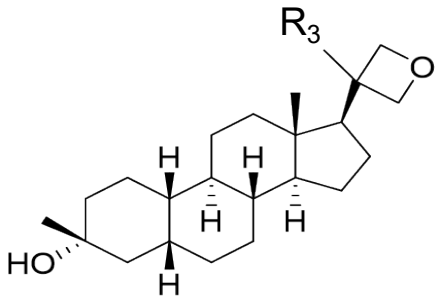
CLAIMS

What is claimed is:

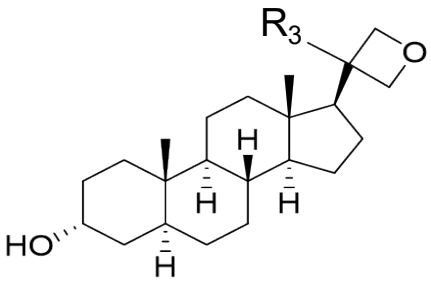
1. A neuroactive steroid having the structure:



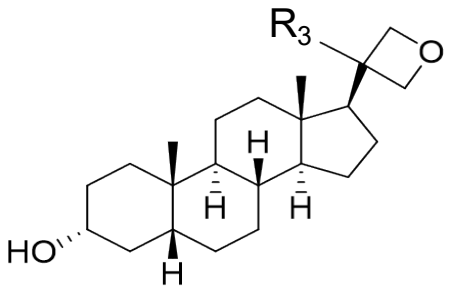
(2),



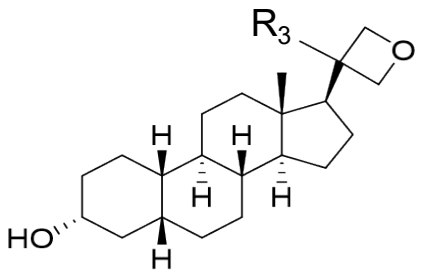
(3),



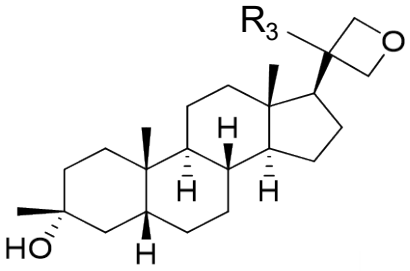
(4),



(5),



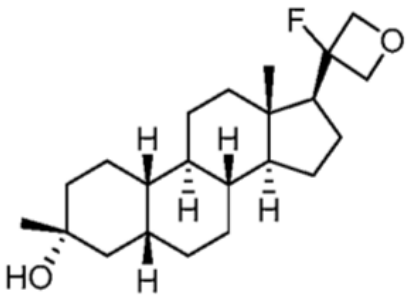
(6),



(7),

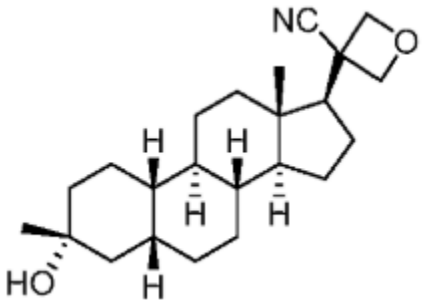
wherein R_3 is H, F, -CN, $-CH_2F$, $-CHF_2$, $-CF_3$, $-CH_2CH_2F$, $-CH_2CHF_2$, or $-CH_2CF_3$.

2. The neuroactive steroid of claim 1, wherein the neuroactive steroid is:



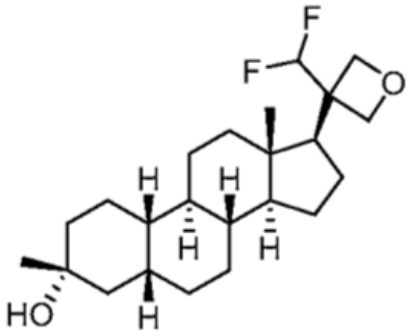
(10).

3. The neuroactive steroid of claim 1, wherein the neuroactive steroid is:



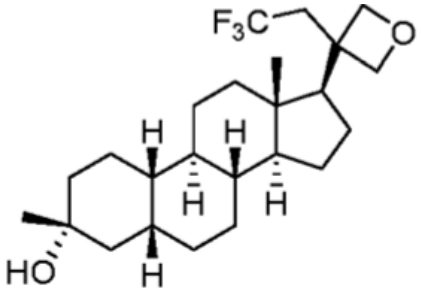
(18).

4. The neuroactive steroid of claim 1, wherein the neuroactive steroid is:



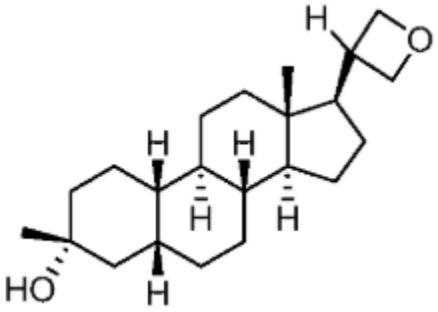
(19).

5. The neuroactive steroid of claim 1, wherein the neuroactive steroid is:



(20).

6. The neuroactive steroid of claim 1, wherein the neuroactive steroid is:



(23).

7. A pharmaceutical composition comprising a neuroactive steroid (NAS) of any one of claims 1-6; and a pharmaceutically acceptable excipient.

8. Use of the neuroactive steroid of any one of claims 1-6 or the pharmaceutical composition of claim 7 in the manufacture of a medicament for the treatment of a disease in a subject, wherein said disease comprises a sleep disorder, insomnia, a mood disorder, depression, dysthymic disorder, mild depression, bipolar disorder, post-traumatic stress disorder (PTSD), obsessive compulsive disorder (OCD), schizophrenia, schizoaffective disorder, a convulsive disorder, epilepsy, status epilepticus (SE), attention deficit hyperactivity disorder (ADHD), dementia, Alzheimer's type dementia, Lewis body type dementia, vascular type dementia,

Huntington's disease, Parkinson's disease, a personality disorder, anti-social personality disorder, obsessive compulsive personality disorder, an autism spectrum disorder (ASD), autism, Rett syndrome, Fragile X syndrome, Angelman syndrome, neuropathic pain, chronic pain, traumatic brain injury (TBI), vascular diseases, stroke, ischemia, a vascular malformation, a substance abuse disorder and/or withdrawal syndrome, tinnitus, or a combination thereof, and wherein an effective dosage of the neuroactive steroid or the pharmaceutical composition is to be administered to the subject.

9. The use of claim 8, wherein the neuroactive steroid or the pharmaceutical composition is to be administered to the subject via intramuscular (IM) injection, subcutaneous (SC) injection, intravenous (IV) injection, oral administration, topical application, implant application or a combination thereof.

10. The use of claim 8 or 9, wherein said disease comprises major depressive disorder (MDD), postpartum depression (PPD), essential tremor, PTSD, SE, Fragile X syndrome, Parkinson’s Disease, or treatment resistant depression.

11. The neuroactive steroid of any one of claims 1-6 or the pharmaceutical composition of claim 7 for use in therapy.