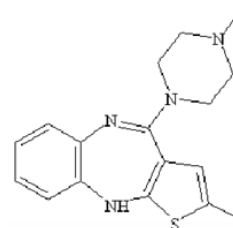


Olanzapine is a psychotropic drug. It is used for the treatment of schizophrenia and bipolar disorder. It is classified into atypical antipsychotic, which has fewer adverse effect, such as extrapyramidal disturbance and hyperprolactinaemia, than typical antipsychotic.

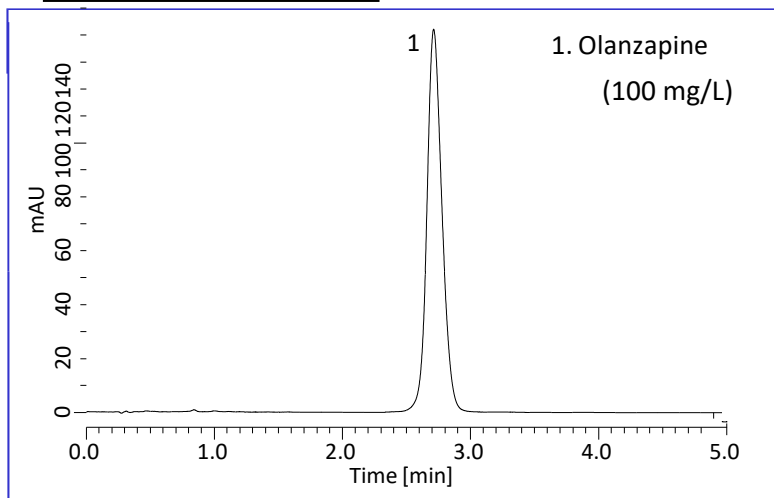
In this note, olanzapine was analyzed under a condition based on United States Pharmacopeia (USP). Obtained peak shape was excellent, which suggests Inertsil C8-4 should be suitable for rapid analysis of olanzapine.

Chemical Structure



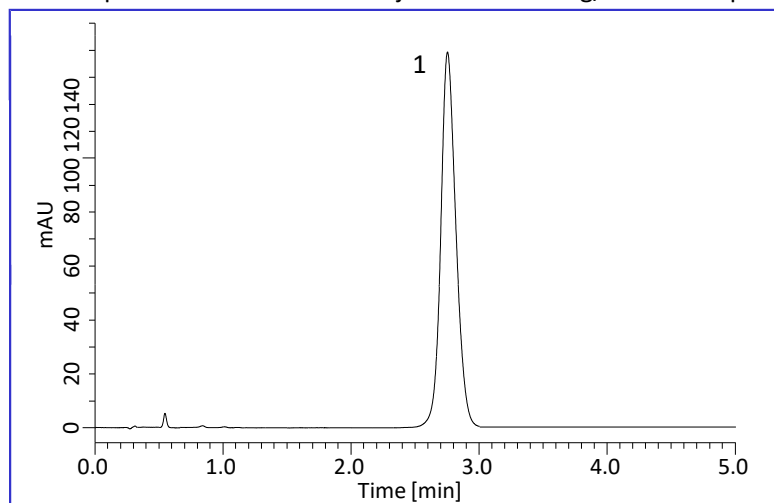
Structures are created using Chemistry 4-D Draw which is provided by ChemInnovation Software, Inc.

Standard Solution



Tablet Sample

The sample concentration was adjusted to 100 mg/L as olanzapine.



Conditions

Column	: Inertsil C8-4 HP (3 µm, 50 x 4.6 mm I.D.)
Column Cat. No. :	5020-14078
Eluent	: A) CH ₃ CN B) 6.9 g/L NaH ₂ PO ₄ (pH 2.5, H ₃ PO ₄) + 12 g/L Sodium dodecyl sulfate A/B = 50/50, v/v
Flow rate	: 1.5 mL/min
Column Temp.	: 25 °C
Detection	: UV 260 nm
Injection Vol.	: 7 µL

Example of Pretreatment Method for Tablet Sample

Sample

- Grind tablet into powder
- Weigh the powder equivalent to one tablet

Extraction

- Add diluent **
- Sonication extraction for 10 min
- Make up to 100 mL with diluent

Filtration

- 0.45 µm membrane filter

Dilution

- Adjust the concentration of olanzapine to 100 mg/L by adding diluent

HPLC

** Diluent: HPLC eluent

GL Sciences disclaims any and all responsibility for any injury or damage which may be caused by this data directly or indirectly. We reserve the right to amend this information or data at any time and without any prior announcement.

GL Sciences, Inc. Japan

22-1 Nishishinjuku 6-Chome
Shinjuku-ku, Tokyo,
163-1130, Japan
Phone: +81-3-5323-6620
Fax: +81-3-5323-6621
Email: world@glsciences.co.jp
Web: www.glsciences.com

GL Sciences B.V.

De Sleutel 9
5652 AS Eindhoven
The Netherlands
Phone: +31 (0)40 254 95 31
Email: info@glsciences.eu
Web: www.glsciences.eu

GL Sciences (ShangHai) Ltd.

Tower B, Room 2003,
Far East International Plaza,
NO,317 Xianxia Road,
Changning District.
Shanghai, China P.C. 200032
Phone: +86 (0)21-6278-2272
Email: contact@glsciences.com.cn
Web: www.glsciences.com.cn

GL Sciences, Inc. USA

4733 Torrance Blvd. Suite 255
Torrance, CA 90503
Phone: 310-265-4424
Fax: 310-265-4425
Email: info@glsciencesinc.com
Web: www.glsciencesinc.com

International Distributors

Visit our Website at:

<https://www.glsciences.com/company/distributor.html>