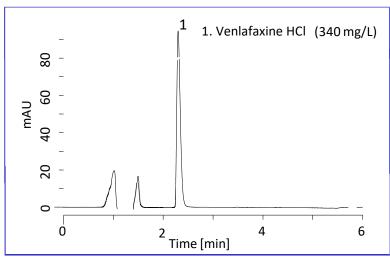
# **Analysis of Venlafaxine**

GL Sciences Inc.

Venlafaxine is a type of serotonin and norepinephrine reuptake inhibitors (SNRIs). SNRIs increase the levels of serotonin and norepinephrine, which are known to play an important role in mood, in the brain.

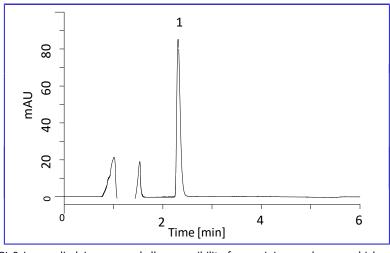
In this note, venlafaxine was analyzed under an condition based on United States Pharmacopeia (USP). The peak shape obtained with InertSustain C18 was excellent although conventional ODS columns provides asymmetric peaks for some of antidepressant drugs.

# Standard Solution



# **Tablet Sample**

The sample concentration was adjusted to 300 mg/L as venlafaxine hydrochloride.:



# **Chemical Structure**

### **Conditions**

Column : InertSustain C18 HP

 $(3 \mu m, 100 \times 4.6 \text{ mm I.D.})$ 

Column Cat. No.: 5020-14444

Eluent : A) CH<sub>2</sub>CN

B) Buffer\*

A/B = 30/70, v/v

Flow rate : 1.0 mL/min

Column temp. : 25 °C

Detection : UV 275 nm

Injection vol. : 10 µL

Sample

**HPLC** 

\* Buffer: 3.4 g of potassium dihydrogenphosphate was dissolved in 700 mL of purified water. To this solution, 5 mL of triethylamine was added. The pH value was adjusted to 3.0 by adding phosphoric acid.

# An Example of Pretreatment **Method for Tablet Sample**

Grind tablet into powder Weigh the powder equivalent to 100 mg of venlafaxine HCl. **Extraction** Add 80 mL of diluent\*\* Sonication extraction for 30 min Make up to 100 mL with diluent **Filtration** 0.45 µm membrane filter Dilution Adjust the concentration of venlafaxine HCl to300 mg/L by adding diluent

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

+81-3-5323-6621

Email: world@gls.co.jp Web: www.glsciences.com

International Distributors

## **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

### **GL Sciences, Inc. USA**

\*\* Diluent: Methanol / 0.1 N HCl = 4/1, v/v

4733 Torrance Blvd. Suite 255 Torrance, CA 90503

Phone: 310-265-4424 310-265-4425

Email: info@glsciencesinc.com www.glsciencesinc.com



### Visit our Website at:

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