SUPPLEMENTARY FIGURES

A Novel Integrated Active Herbal Formulation Ameliorates Dry Eye Syndrome by Inhibiting Inflammation and Oxidative Stress and Enhancing Glycosylated Phosphoproteins in Rats

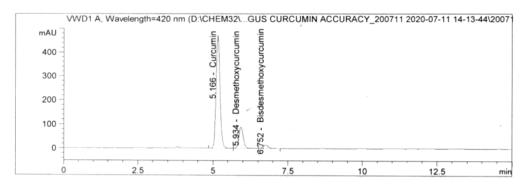
Omer Ersin Muz, Cemal Orhan, Fusun Erten, Mehmet Tuzcu, Ibrahim Hanifi Ozercan, Prafull Singh, Abhijeet Morde, Muralidhara Padigaru⁵, Deshanie Rai⁵, Kazim Sahin^{2*}

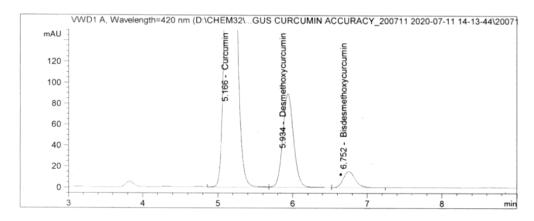
```
Data file : D:\CHEM32\DATA\2020\JULY\NG CURCUMIN\NGUS CURCUMIN ACCURACY->
Sample Name: STANDARD_WS/CUR/005 1

Injection Date : Sat, 11. Jul. 2020 Seq Line : 2
Sample Name : STANDARD_WS/CUR/005 Location : Vial 2
Acq Operator : KINJAL Inj. No. : 3
Inj. Vol. : 20 µl

Acq. Method : D:\Chem32\Data\2020\JULY\NG CURCUMIN\NGUS CURCUMIN ->
```

Analysis Method: D:\CHEM32\METHOD\CURCUMIN P.M\CURCUMIN P.M





Signal 0: VWD1 A, Wavelength=420 nm

| Peak | Name | 1 | RT | Area | Height | Area % | Symmetry |
|--------|--------------------|---|-------|---------|-----------|--------|----------|
| # | | 1 | [min] | 1 | 1 | | |
| | | | | | - | | |
| 1 Curc | umin | 1 | 5.166 | 4315.83 | 0 470.371 | 80.089 | 0.863 |
| 2 Desm | ethoxycurcumin | 1 | 5.934 | 903.63 | 5 89.261 | 16.769 | 0.883 |
| 3 Bisd | lesmethoxycurcumin | 1 | 6.752 | 169.29 | 8 15.344 | 3.142 | 0.813 |
| | | | | | | | |

Figure S1. HPLC chromatograms of curcuminoids

2020-05-14 11-31-51\2005140000004.D

Injection Date & Time: Thu, 14. May. 2020 12:37:48 PM

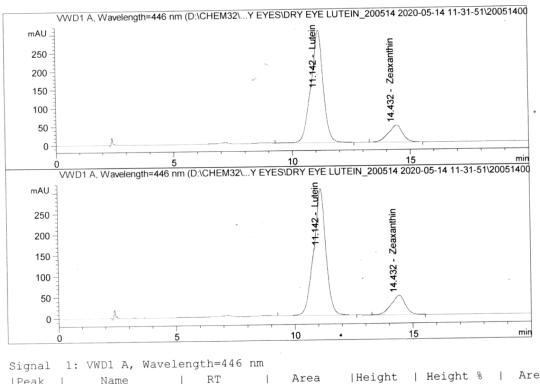
Sample Name : STD WS/LZO/002

Acq Operator : AP Seq Line :3 Location : Vial 2 Inj.Vol.:20 µl Inj. No. :2

Acq. Method : D:\Chem32\Data\2020\MAY\DRY EYES\DRY EYE LUTEIN_200514

2020-05-14 11-31-51\DRY EYE GRADIENT13.M

Analysis Method: D:\CHEM32\METHOD\DRY EYE GRADIENT13.M



| Signal | 1: VWD1 A, | Wavelength=446 | nm | | | |
|--------|------------|----------------|----------|--------|-----------|--------|
| Peak | Name | RT | Area | | 1 110 - 9 | Area |
| # | 1 | [min] | | | | |
| | | | | 1 | 1 | 1 |
| 11 | Lutein | 111.14 | 10772.57 | 303.89 | 186.86 | 185.07 |
| 12 | Zeaxanthin | 114.43 | 11890.74 | 45.99 | 13.14 | 14.93 |
| , – | | | | | | |

Figure S2. HPLC Chromatograms of lutein and zeaxanthin

Area % Report

Sample Name: Standard Solution

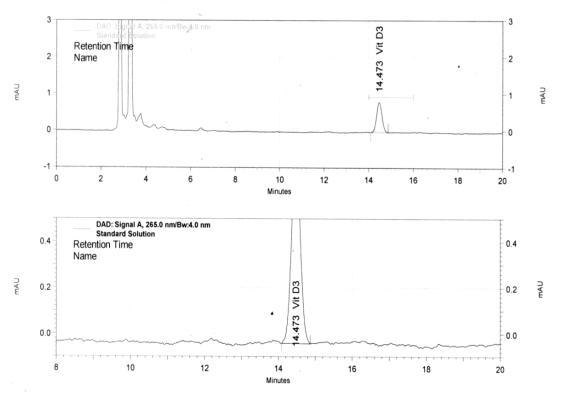
Data File: C:\Enterprise\Projects\2020\JULY\RESULT\DRY EYE\Vitamin

D3\20200716_Precision.rslt\002_Standard Solution-Rep1.dat

Method: C:\Enterprise\Projects\2020\Methods\Vitamin D3\STD 20MIN.met

Acquired: 16-07-2020 19:22:57 (GMT +05:30)
Printed: 17-07-2020 10:47:24 (GMT +05:30)
Vial No: 52 Injection Volume: 50

Data Description : {Data Description}



DAD: Signal A, 265.0 nm/Bw:4.0 nm Results

| Name | Retention Time | Area | Theoretical plates (USP) | Asymmetry |
|--------|----------------|---------|--------------------------|-----------|
| Vit D3 | 14.47 | 1861126 | 16479 | 1.04 |
| Totals | | 1861126 | | |

Figure S3. HPLC Chromatograms of vitamin D3