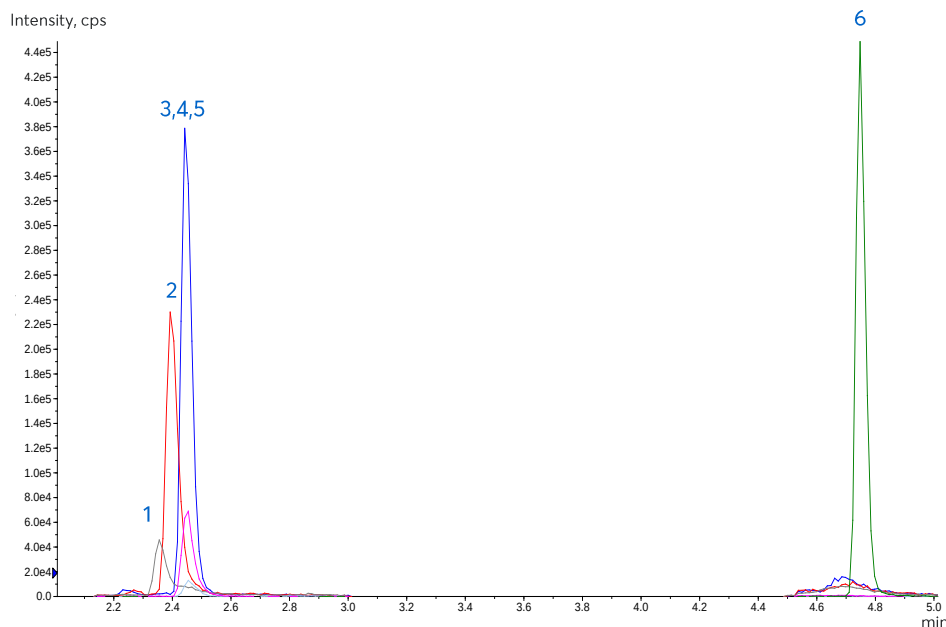


# Insulin Analogues in Clinical and Post-Mortem Analyses



1. Glargine (MW 6063)  
Quantifier  $m/z$  867.2  $\rightarrow$  136  
Qualifier  $m/z$  1011.4  $\rightarrow$  1164.2  
Qualifier  $m/z$  1011.4  $\rightarrow$  1179.4
2. Bovine insulin (IS) (MW ~5800)  
Quantifier  $m/z$  956.5  $\rightarrow$  136.1  
Qualifier  $m/z$  N/A
3. Aspart (MW 5826)  
Quantifier  $m/z$  971.7  $\rightarrow$  136  
Qualifier  $m/z$  1166  $\rightarrow$  219  
Qualifier  $m/z$  971.7  $\rightarrow$  226.1
4. Lispro (MW 5808)  
Quantifier  $m/z$  1162.4  $\rightarrow$  217  
Qualifier  $m/z$  968.6  $\rightarrow$  217
5. Insulin R (MW 5808)  
Quantifier  $m/z$  1162.4  $\rightarrow$  345.2  
Qualifier  $m/z$  1162.3  $\rightarrow$  65.2  
Qualifier  $m/z$  1162.4  $\rightarrow$  226.1
6. Detemir (MW 5917)  
Quantifier  $m/z$  1184  $\rightarrow$  454.4  
Qualifier  $m/z$  987  $\rightarrow$  454.4  
Qualifier  $m/z$  1184.0  $\rightarrow$  357.4

# Method Details

## CONDITIONS

Column: Avantor® ACE® 5 C18-300

Particle Size: 5 µm

Dimensions: 50 x 2.1 mm

Mobile Phase: A: 0.1% acetic acid in H<sub>2</sub>O  
B: 0.1% acetic acid in IPA/MeCN (25:75 v/v)

Gradient:

| Time (mins) | % B |
|-------------|-----|
| 0.0         | 22  |
| 0.5         | 22  |
| 1.0         | 34  |
| 3.0         | 36  |
| 4.0         | 98  |
| 6.2         | 98  |
| 6.3         | 22  |

Flow Rate: 0.55 mL/min

Injection: 40 µL

Detection: AB Sciex QTRAP 5500  
ESI positive ion mode  
Ion spray voltage: 5500 V  
Temperature: 600 °C

Sample: 100 µU/mL insulin analogues in steroid-free serum

## ORDERING TABLE

| Product                 | Details     | Size        | Part Number  |
|-------------------------|-------------|-------------|--------------|
| Avantor® ACE® 5 C18-300 | HPLC Column | 50 x 2.1 mm | ACE-221-0502 |

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