R = H  
Jerantinine B

R = COMe  
Jerantinine B acetate
Effects of jerantinine B and jerantinine B acetate on cancer cell growth

**A**
HCT-116

**B**
MCF-7

**C**
A549

**D**
Mia Paca 2

**E**

**F**

Cell count x 10^3/100 μl

- **Control**
- 0.1
- 0.2
- 0.5
- 1

- **HCT-116**

**Mia PaCa-2**

- **Control**
- 0.1
- 0.2
- 0.5
- 1

- $T_0$
Effects of jerantinine B on cell cycle

A

HCT-116

% of events

Concentration (μM)

B

A549

% of events

Concentration (μM)

C

MCF-7

% of events

Concentration (μM)

D

MIA PaCa-2

% of events

Concentration (μM)
<table>
<thead>
<tr>
<th></th>
<th>HCT-116</th>
<th></th>
<th>MIA PaCa-2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>C</td>
<td>1x</td>
<td>2x</td>
<td>C</td>
</tr>
<tr>
<td>Whole PARP (116 kDa)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cleaved PARP (89 kDa)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mcl-1 (40 kDa)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bcl-2 (26 kDa)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PLK1 (62 kDa)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TUBB (50 kDa)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GAPDH (37 kDa)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**VR HCT-116**

- Pgp (170 kDa)

**Wild type HCT-116**

- GAPDH
Effect of Jerantinine B on cellular ROS Production

% of ROS production

Cell Lines

- HCT-116
- VR HCT-116
- MIA PaCa-2

Control
Vin $1xGI_{50}$
JB $1xGI_{50}$

Bar chart showing the percentage of ROS production for different cell lines under control and treated conditions.
Effect of Jerantinine-B on the activity of PLK1

IC$_{50}$ = 1.5 μM