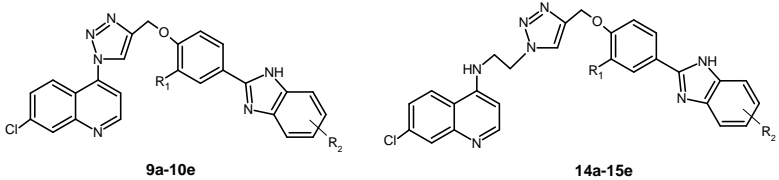
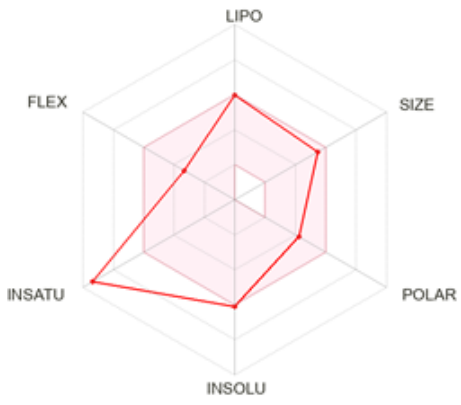
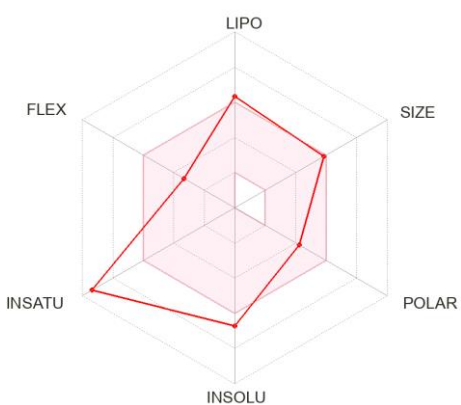


**Table S1.** Bioavailability radars for the 20 quinoline-benzimidazole hybrids. The pink area represents the optimal range for each property (lipophilicity (XLOGP3); size (MW); polarity (TPSA); water sol-ubility (log S); saturation (Fraction Csp<sup>3</sup>); and flexibility (number of rotatable bonds, FLEX).

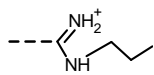
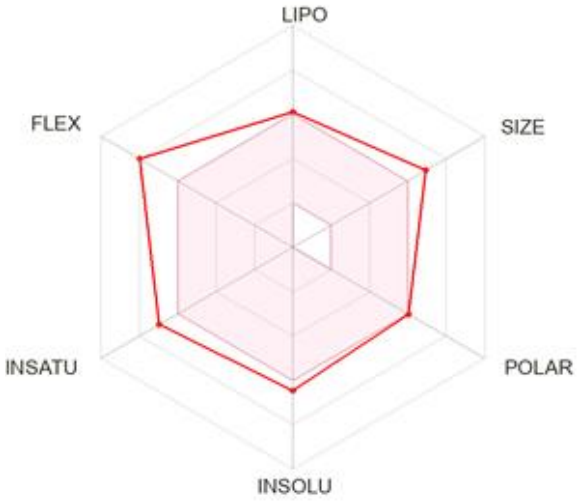
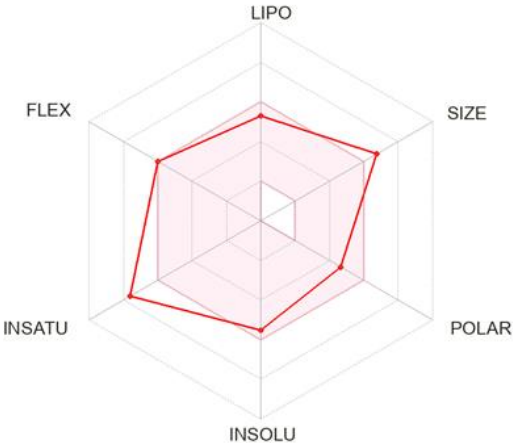
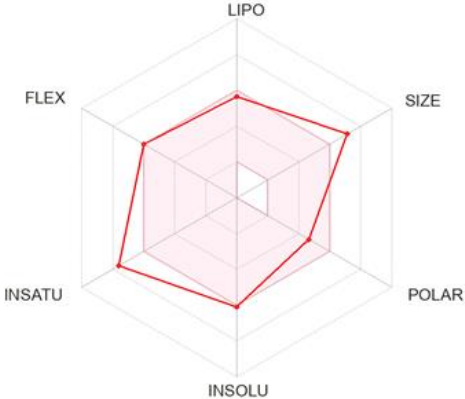
|       |                |                |  <p style="text-align: center;"><b>9a-10e</b>                      <b>14a-15e</b></p> |
|-------|----------------|----------------|---|
| Comp. | R <sub>1</sub> | R <sub>2</sub> |   |
| 9a    | H              | H              |    |
| 9b    | H              | Cl             |   |

|    |   |                  |  |
|----|---|------------------|--|
| 9c | H | OCH <sub>3</sub> |  |
| 9d | H |                  |  |
| 9e | H |                  |  |

|     |    |                  |   |
|-----|----|------------------|---|
| 10a | Br | H                | <p>A radar chart with six axes: LIPO (top), SIZE (top-right), POLAR (bottom-right), INSOLU (bottom), INSATU (bottom-left), and FLEX (top-left). The chart has five concentric grid lines. A red line connects the data points for each axis. The values are approximately: LIPO (4.5), SIZE (4.5), POLAR (2.5), INSOLU (3.5), INSATU (4.5), and FLEX (3.5).</p> |
| 10b | Br | Cl               | <p>A radar chart with six axes: LIPO (top), SIZE (top-right), POLAR (bottom-right), INSOLU (bottom), INSATU (bottom-left), and FLEX (top-left). The chart has five concentric grid lines. A red line connects the data points for each axis. The values are approximately: LIPO (4.5), SIZE (4.5), POLAR (2.5), INSOLU (3.5), INSATU (4.5), and FLEX (3.5).</p> |
| 10c | Br | OCH <sub>3</sub> | <p>A radar chart with six axes: LIPO (top), SIZE (top-right), POLAR (bottom-right), INSOLU (bottom), INSATU (bottom-left), and FLEX (top-left). The chart has five concentric grid lines. A red line connects the data points for each axis. The values are approximately: LIPO (4.5), SIZE (4.5), POLAR (2.5), INSOLU (3.5), INSATU (4.5), and FLEX (3.5).</p> |

|     |    |                          |  |
|-----|----|--------------------------|--|
| 10d | Br | <chem>N=[NH2+]</chem>    |  |
| 10e | Br | <chem>CCCN=[NH2+]</chem> |  |
| 14a | H  | H                        |  |

|     |   |                  |  |
|-----|---|------------------|--|
| 14b | H | Cl               |  |
| 14c | H | OCH <sub>3</sub> |  |
| 14d | H |                  |  |

|     |    |   |  |
|-----|----|---|--|
| 14e | H  |  |    |
| 15a | Br | H   |   |
| 15b | Br | Cl  |  |

|     |    |                  |  |
|-----|----|------------------|--|
| 15c | Br | OCH <sub>3</sub> |  |
| 15d | Br |                  |  |
| 15e | Br |                  |  |