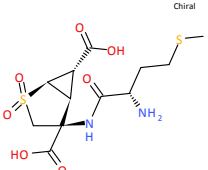
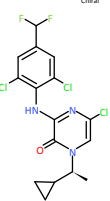
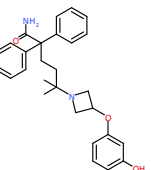
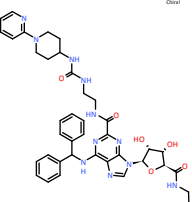
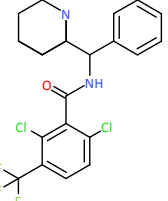


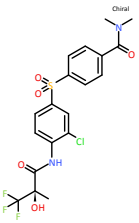
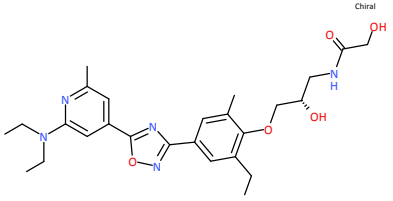
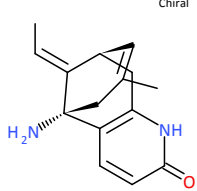
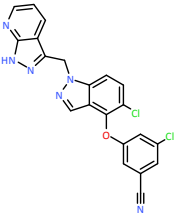
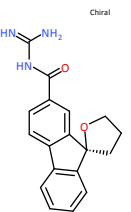
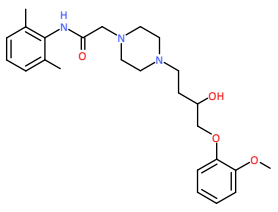
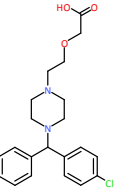
An Efficient and Scalable Route to an HCV NS5b Cyclic Nucleoside Prodrug through the Discovery of New Reactions and Processes

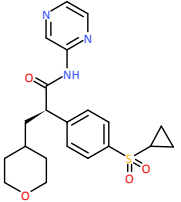
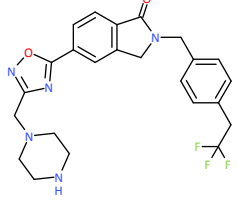
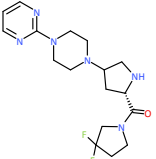
Robert K. Orr*, Jamie M. McCabe Dunn*, Andrew Nolting, Alan M. Hyde, Eric R. Ashley, Joseph Leone, Eric Sirota, Jon A. Jurica, Andrew Gibson, Chris Wise, Steven Oliver, and Rebecca T. Ruck

Department of Process Research & Development, Merck & Co., Inc., Rahway, NJ 07065, USA

Table 1. PMI's from Kjell et al paperⁱ compared to Merck's predicted PMI calculated from our complexity modelⁱⁱ

Name	Structure	PMI ⁱ	Predicted PMI from Complexity ⁱⁱ
Kjell Paper-1	 <p>Chiral</p>	1350	616
Kjell Paper-2	 <p>Chiral</p>	366	242
Kjell Paper-3		268	242
Kjell_Paper-4	 <p>Chiral</p>	439	590
Kjell_Paper-5	 <p>Chiral</p>	86	215

Kjell_Paper-6	 <p>Chiral</p>	428	269
Kjell_Paper-7	 <p>Chiral</p>	588	322
Kjell_Paper-8	 <p>Chiral</p>	18377	296
Kjell_Paper-9	 <p>Chiral</p>	223	215
Kjell_Paper-10	 <p>Chiral</p>	196	215
Kjell_Paper-11	 <p>Chiral</p>	75	162
Kjell_Paper-12	 <p>Chiral</p>	125	82

Kjell_Paper-13	<p style="text-align: center;">Chiral</p> 	495	269
Kjell_Paper-14		125	215
Kjell_Paper-15	<p style="text-align: center;">Chiral</p> 	242	242

ⁱ D. P. Kjell, I. A. Watson, C. N. Wolfe, J. T. Spitler, *Org. Process. Res. Dev.* **2013**, *17*, 169–174.

ⁱⁱ R. P. Sheridan, N. Zorn, E. C. Sherer, L. Campeau, C. Z. Chang, J. Cumming, M. L. Maddess, P. G. Nantermet, C. J. Sinz and P. D. O. Shea, *J. Chem. Inf. Model.* 2014, **54**, 1604–1616