

Figure 13: Relative Valuation – Pharmaceuticals

Bond Description	Coupon	Priority	Maturity	Size (\$MM)	Moody's	S&P	Price	YTW	STT	YTW Date	LTM (PF) EBITDA	Net Debt / EBITDA	TEV / EBITDA
Pharmaceuticals													
Amag Pharmaceutical (AMAG)	7.875%	Senior Notes	09/01/23	\$500	Ba3	BB-	97.500	8.43%	612	09/01/23	\$242	2.0x	4.1x
Concordia Healthcare (CXRCN)	9.000%	1st Lien Bonds	04/01/22	\$350	Caa2	CCC-	86.750	13.46%	1,128	04/01/22	\$325	5.3x	10.1x
Concordia Healthcare (CXRCN)	9.500%	Senior Notes	10/21/22	\$790	C	D	10.250	109.88%	10,764	10/21/22	\$325	10.0x	10.1x
Concordia Healthcare (CXRCN)	7.000%	Senior Notes	04/15/23	\$735	C	D	9.500	99.97%	9,769	04/15/23	\$325	10.0x	10.1x
Endo Pharmaceuticals (ENDP)	5.875%	1st Lien Bonds	10/15/24	\$300	Ba2	BB-	101.530	5.48%	330	04/15/22	\$1,777	1.6x	5.2x
Endo Pharmaceuticals (ENDP)	7.250%	Senior Notes	01/15/22	\$396	B3	CCC+	87.250	11.21%	906	01/15/22	\$1,777	4.2x	5.2x
Endo Pharmaceuticals (ENDP)	5.750%	Senior Notes	01/15/22	\$700	B3	CCC+	84.000	10.66%	851	01/15/22	\$1,777	4.2x	5.2x
Endo Pharmaceuticals (ENDP)	5.375%	Senior Notes	01/15/23	\$750	B3	CCC+	78.375	11.01%	874	01/15/23	\$1,777	4.2x	5.2x
Endo Pharmaceuticals (ENDP)	6.000%	Senior Notes	07/15/23	\$1,635	B3	CCC+	78.250	11.33%	903	07/15/23	\$1,777	4.2x	5.2x
Endo Pharmaceuticals (ENDP)	6.000%	Senior Notes	02/01/25	\$1,200	B3	CCC+	78.000	10.42%	801	02/01/25	\$1,777	4.2x	5.2x
Horizon Pharmaceuticals (HZNP)	6.625%	Senior Notes	05/01/23	\$475	B3	B-	99.500	6.74%	445	05/01/23	\$424	3.0x	8.8x
Horizon Pharmaceuticals (HZNP)	8.750%	Senior Notes	11/01/24	\$300	B3	B-	105.875	7.31%	506	11/01/22	\$424	3.0x	8.8x
MallinKrodt (MNK)	4.875%	Senior Notes	04/15/20	\$700	B1	BB-	96.750	6.40%	446	04/15/20	\$1,436	1.1x	5.4x
MallinKrodt (MNK)	9.500%	Senior Notes	05/01/22	\$10	WR	NR	123.555	3.66%	147	05/01/22	\$1,436	1.1x	5.4x
MallinKrodt (MNK)	5.750%	Senior Notes	08/01/22	\$884	B1	BB-	92.000	7.83%	662	08/01/22	\$1,436	1.1x	5.4x
MallinKrodt (MNK)	8.000%	Senior Notes	03/01/23	\$4	WR	NR	119.861	3.79%	152	03/01/23	\$1,436	1.1x	5.4x
MallinKrodt (MNK)	5.625%	Senior Notes	10/15/23	\$738	B1	BB-	86.600	8.60%	628	10/15/23	\$1,436	1.1x	5.4x
MallinKrodt (MNK)	5.500%	Senior Notes	04/15/25	\$692	B1	BB-	82.719	8.72%	631	04/15/25	\$1,436	1.1x	5.4x
MallinKrodt (MNK)	3.500%	Senior Notes	04/15/18	\$300	B2	B	100.001	3.50%	298	04/15/18	\$1,436	3.8x	5.4x
MallinKrodt (MNK)	4.750%	Senior Notes	04/15/23	\$542	B2	B	80.025	8.59%	731	04/15/23	\$1,436	3.8x	5.4x
Teva Pharmaceutical Industries (TEVA)	1.400%	Senior Notes	07/20/18	\$1,500	Baa3	BBB-	99.473	2.34%	136	07/20/18	\$7,240	4.7x	7.3x
Teva Pharmaceutical Industries (TEVA)	0.125%	Senior Notes	07/27/18	\$300	Baa3	NR	99.576	0.86%	(16)	07/27/18	\$7,240	4.7x	7.3x
Teva Pharmaceutical Industries (TEVA)	1.500%	Senior Notes	10/25/18	\$450	Baa3	BBB-	100.515	0.88%	(56)	10/25/18	\$7,240	4.7x	7.3x
Teva Pharmaceutical Industries (TEVA)	2.875%	Senior Notes	04/15/19	\$1,000	Baa3	BBB-	101.620	1.62%	(16)	04/15/19	\$7,240	4.7x	7.3x
Teva Pharmaceutical Industries (TEVA)	1.700%	Senior Notes	07/19/19	\$2,000	Baa3	BBB-	97.270	3.49%	166	07/19/19	\$7,240	4.7x	7.3x
Teva Pharmaceutical Industries (TEVA)	2.250%	Senior Notes	03/18/20	\$700	Baa3	BBB-	96.717	3.78%	186	03/18/20	\$7,240	4.7x	7.3x
Teva Pharmaceutical Industries (TEVA)	0.375%	Senior Notes	07/25/20	\$1,750	Baa3	BBB-	95.599	2.12%	15	07/25/20	\$7,240	4.7x	7.3x
Teva Pharmaceutical Industries (TEVA)	2.200%	Senior Notes	07/21/21	\$3,000	Baa3	BBB-	91.473	4.80%	271	07/21/21	\$7,240	4.7x	7.3x
Teva Pharmaceutical Industries (TEVA)	3.650%	Senior Notes	11/10/21	\$613	Baa3	BBB-	96.046	4.77%	264	11/10/21	\$7,240	4.7x	7.3x
Teva Pharmaceutical Industries (TEVA)	3.650%	Senior Notes	11/10/21	\$688	Baa3	BBB-	95.470	4.93%	281	11/10/21	\$7,240	4.7x	7.3x
Teva Pharmaceutical Industries (TEVA)	0.500%	Senior Notes	07/28/22	\$350	Baa3	BBB-	90.219	2.76%	54	07/28/22	\$7,240	4.7x	7.3x
Teva Pharmaceutical Industries (TEVA)	2.950%	Senior Notes	12/18/22	\$844	Baa3	BBB-	89.457	5.36%	310	12/18/22	\$7,240	4.7x	7.3x
Teva Pharmaceutical Industries (TEVA)	1.250%	Senior Notes	03/31/23	\$1,300	Baa3	BBB-	91.555	2.97%	69	03/31/23	\$7,240	4.7x	7.3x
Teva Pharmaceutical Industries (TEVA)	2.800%	Senior Notes	07/21/23	\$3,000	Baa3	BBB-	87.281	5.45%	314	07/21/23	\$7,240	4.7x	7.3x
Teva Pharmaceutical Industries (TEVA)	1.125%	Senior Notes	10/15/24	\$1,500	Baa3	BBB-	87.118	3.22%	83	10/15/24	\$7,240	4.7x	7.3x
Teva Pharmaceutical Industries (TEVA)	1.000%	Senior Notes	07/28/25	\$350	Baa3	BBB-	86.110	3.04%	62	07/28/25	\$7,240	4.7x	7.3x
Teva Pharmaceutical Industries (TEVA)	3.150%	Senior Notes	10/01/26	\$3,500	Baa3	BBB-	82.184	5.74%	328	10/01/26	\$7,240	4.7x	7.3x
Teva Pharmaceutical Industries (TEVA)	1.875%	Senior Notes	03/31/27	\$700	Baa3	BBB-	87.125	3.50%	102	03/31/27	\$7,240	4.7x	7.3x
Teva Pharmaceutical Industries (TEVA)	1.625%	Senior Notes	10/15/28	\$750	Baa3	BBB-	83.417	3.46%	95	10/15/28	\$7,240	4.7x	7.3x
Teva Pharmaceutical Industries (TEVA)	6.150%	Senior Notes	02/01/36	\$789	Baa3	BBB-	100.057	6.14%	351	02/01/36	\$7,240	4.7x	7.3x
Teva Pharmaceutical Industries (TEVA)	4.100%	Senior Notes	10/01/46	\$2,000	Baa3	BBB-	76.276	5.79%	298	10/01/46	\$7,240	4.7x	7.3x
Valeant Pharmaceuticals (VRXCN)	6.500%	1st Lien Notes	03/15/22	\$1,250	Ba3	BB-	105.250	4.66%	289	03/15/19	\$3,808	1.9x	8.6x
Valeant Pharmaceuticals (VRXCN)	7.000%	1st Lien Notes	03/15/24	\$2,000	Ba3	BB-	107.750	4.81%	288	03/15/20	\$3,808	1.9x	8.6x
Valeant Pharmaceuticals (VRXCN)	5.500%	1st Lien Notes	11/01/25	\$1,750	Ba3	BB-	102.375	4.95%	270	11/01/22	\$3,808	1.9x	8.6x
Valeant Pharmaceuticals (VRXCN)	5.375%	Senior Notes	03/15/20	\$2,000	Caa1	B-	100.250	5.18%	340	03/15/19	\$3,808	6.6x	8.6x
Valeant Pharmaceuticals (VRXCN)	7.000%	Senior Notes	10/01/20	\$259	Caa1	B-	101.280	5.28%	395	10/01/18	\$3,808	6.6x	8.6x
Valeant Pharmaceuticals (VRXCN)	6.375%	Senior Notes	10/15/20	\$1,681	Caa1	B-	101.300	4.72%	332	10/15/18	\$3,808	6.6x	8.6x
Valeant Pharmaceuticals (VRXCN)	7.500%	Senior Notes	07/15/21	\$1,625	Caa1	B-	102.500	6.22%	526	07/15/18	\$3,808	6.6x	8.6x
Valeant Pharmaceuticals (VRXCN)	6.750%	Senior Notes	08/15/21	\$650	Caa1	B-	101.125	5.73%	397	02/15/19	\$3,808	6.6x	8.6x
Valeant Pharmaceuticals (VRXCN)	5.625%	Senior Notes	12/01/21	\$900	Caa1	B-	88.250	6.13%	399	12/01/21	\$3,808	6.6x	8.6x
Valeant Pharmaceuticals (VRXCN)	7.250%	Senior Notes	07/15/22	\$550	Caa1	B-	101.000	6.57%	474	07/15/19	\$3,808	6.6x	8.6x
Valeant Pharmaceuticals (VRXCN)	5.500%	Senior Notes	03/01/23	\$1,000	Caa1	B-	92.000	7.37%	509	03/01/23	\$3,808	6.6x	8.6x
Valeant Pharmaceuticals (VRXCN)	5.875%	Senior Notes	05/15/23	\$3,250	Caa1	B-	93.000	7.46%	517	05/15/23	\$3,808	6.6x	8.6x
Valeant Pharmaceuticals (VRXCN)	4.500%	Senior Notes	05/15/23	\$1,500	Caa1	B-	89.846	6.76%	446	05/15/23	\$3,808	6.6x	8.6x
Valeant Pharmaceuticals (VRXCN)	6.125%	Senior Notes	04/15/25	\$3,250	Caa1	B-	82.125	7.53%	512	04/15/25	\$3,808	6.6x	8.6x
Valeant Pharmaceuticals (VRXCN)	9.000%	Senior Notes	12/15/25	\$1,500	Caa1	B-	105.000	7.94%	561	12/15/23	\$3,808	6.6x	8.6x

Source: Deutsche Bank, Bloomberg Finance LP, and Company Disclosures

