

# Relief Therapeutics Holding AG

Switzerland | Biotechnology

## News update

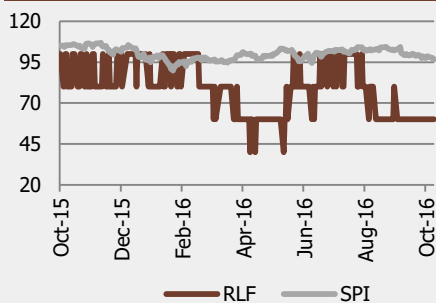
26 October 2016

### Company Data

Price:	CHF 0.03
Market Cap:	CHF58m
Free Float (%):	12.8%
Nr. of shares:	1'946'627'375
Avg. traded vol. (1 year):	342'098
Bloomberg:	RLF SW
Reuters:	RLFB.S
ISIN:	CH0100191136

Source: SIX Swiss Exchange and Bloomberg

### Share Price Development (rebased)



Source: Bloomberg

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## Advancing the development of atexakin alfa

### Strategic collaboration agreement with PXTherapeutics

Relief Therapeutics ('Relief') inked an agreement with PXTherapeutics, earlier this month, for the production of atexakin alfa, a low-dose formulation of the recombinant human protein interleukin-6 (IL-6). The drug is targeted at the treatment of peripheral diabetic neuropathy by regenerating damaged nerve fibres with the objective of relieving the associated symptoms. PXTherapeutics, a subsidiary of the Aguetant group, is a French contract development and manufacturing organisation (CDMO) specializing in the customer-tailored development of recombinant proteins.

Under the terms of the agreement, PXTherapeutics will optimize the existing production process for recombinant IL-6, a 185-amino acids cytokine, in Chinese hamster ovary (CHO) cells. PXTherapeutics will also produce the clinical material that will be used for clinical trials.

We believe that the expertise of PXTherapeutics in developing recombinant proteins will benefit Relief in efficiently conducting its clinical trials for atexakin alfa. Further, PXTherapeutics may develop a commercial-scale process for the production of the drug.

### Strategic collaboration agreement with FirstString

Relief has also established a research collaboration with FirstString Research Inc. ('FirstString') to further the clinical development of atexakin alfa in the US. This is another key agreement signed by Relief, post its recent collaboration with PXTherapeutics.

Under the terms of the agreement, FirstString will seek US government financial support, develop relevant collaborations, and provide resources towards the Food and Drug Administration (FDA) requirements on the constitution of an Investigational New Drug (IND) application dossier for atexakin alfa in diabetic neuropathy.

This collaboration will also enable Relief to get better access to US-based grant funding from US governmental sources such as the National Institutes of Health (NIH). Given FirstString's solid track record in obtaining grant-based funding, we believe Relief will be greatly benefitted in raising the necessary funds to conduct the clinical trials for atexakin alfa. This collaboration agreement may also pave the way for atexakin alfa to be tested in US clinical trials.

### Conclusion

We think that by entering into these two partnerships, the company has taken bold steps and it is developing in the right direction with respect to getting its products in the market within the estimated timeline. Relief is, simultaneously, also working on the proposed acquisition of FirstString for which it had signed the term sheet in July this year. We are of the view that once this acquisition goes through, Relief will also benefit in terms of getting access to grant-based funding for clinical trials of its other MPCs.

### Valuation

These partnerships have reinforced our positive view on the company. Both the agreements complement Relief's clinical development efforts. The partnership with PXTherapeutics will enable Relief to advance its clinical trials in Europe and help it to save cost on the expensive clinical trials, by outsourcing it to a CDMO. The other partnership with FirstString provides a suitable platform for Relief to carry out the clinical trials for its MPCs and target a potential launch in a highly lucrative US market. We have, however, not changed our valuation estimates as there was no visibility in terms of the financial impact of these two deals.

Our current approach values the company at CHF0.19 per share, with upside potential. We believe that Relief might enter into similar partnerships / agreements in the future. It may also look towards other attractive acquisition opportunities (other than FirstString) which would consolidate its pipeline of drug candidates.

**Exhibit 1: Risk-Adjusted NPV-Based Valuation Methodology – aviptadil for sarcoidosis**

<b>Aviptadil - Sarcoidosis</b>	<b>Base Case</b>
Total Patients with Sarcoidosis <sup>1</sup>	173,942
Patients seeking treatment	86,971
Peak market share	22%
Treatment revenue/year/patient <sup>2</sup>	15,157
Peak sales (mn) <sup>3</sup>	290.0
Launch	2021
Peak sales year	2027
Patent expiration <sup>4</sup>	2026
Discount rate	23%
Probability of success <sup>5</sup>	63%
Risk-adjusted NPV (mn)	100
NPV per share	0.05
Estimated Net Cash Position (Q3 2017)	10
Total enterprise value	89
Shares Outstanding (mn) (Q3 2017)	1,947
<b>Notes on assumptions:</b>	
<sup>1</sup> Sarcoidosis patients - The US and European Union (in peak sales year)	
<sup>2</sup> Revenue/year/patient - premium pricing justified as no other effective treatment, without negative side effects, currently available	
<sup>3</sup> Peak sales - treatment revenue/year/patient x total patients x peak market share	
<sup>4</sup> Earliest patent expiry year	
<sup>5</sup> Scheduled to enter Phase 3 clinical trials in H1 2017 and is covered under the orphan drug designation	

Source: Research Dynamics

**Exhibit 2: Risk-Adjusted NPV-Based Valuation Methodology – atexakin alfa for diabetic neuropathy**

<b>Atexakin Alfa - DN</b>	<b>Base Case</b>
Total Patients with Painful Diabetic neuropathy <sup>1</sup>	14,837,485
Total Patients with Postherpatic neuralgia <sup>1</sup>	184,444
Patients seeking treatment <sup>2</sup>	7,604,421
Peak market share	10%
Treatment revenue/year/patient <sup>3</sup>	3,662
Peak sales (mn) <sup>5</sup>	2,785
Launch	2022
Peak sales year	2029
Patent expiration	2026
Discount rate	23%
Probability of success <sup>5</sup>	32%
Risk-adjusted NPV (mn)	195
NPV per share	0.10
Estimated Net Cash Position (Q3 2017)	10
Total enterprise value	184
Shares Outstanding (mn) (Q3 2017)	1,947
<b>Notes on assumptions:</b>	
<sup>1</sup> Painful Diabetic neuropathy and postherpatic neuralgia patients - The US and European Union (in peak sales year)	
<sup>2</sup> Patients with painful diabetic neuropathy and postherpatic neuralgia seeking treatment	
<sup>3</sup> Revenue/year/patient - estimated to start at CHF2,500 for US and CHF2,000 for EU	
<sup>4</sup> Peak sales - treatment revenue/year/patient x total patients x peak market share	
<sup>5</sup> Probability of success - Atexakin Alfa is scheduled to enter phase 2 trials in H12017	
<sup>5</sup> Scheduled to enter Phase 3 clinical trials and is covered under the orphan drug designation	

Source: Research Dynamics

**Exhibit 3: Risk-Adjusted NPV-Based Valuation Methodology – aviptadil for acute lung injury**

<b>Aviptadil - ALI</b>	<b>Base Case</b>
Total Patients with ALI <sup>1</sup>	544,902
Peak market share <sup>2</sup>	18%
Treatment revenue/year/patient <sup>3</sup>	4,406
Peak sales (mn) <sup>4</sup>	432.1
Launch	2022
Peak sales year	2029
Patent expiration	2026
Discount rate	23%
Probability of success <sup>5</sup>	32%
Risk-adjusted NPV (mn)	96.8
NPV per share	0.05
Estimated Net Cash Position (Q3 2017)	10
Total enterprise value	87
Shares Outstanding (mn) (Q3 2017)	1,947
<u>Notes on assumptions:</u>	
<sup>1</sup> ALI patients - The US and European Union (in peak sales year)	
<sup>2</sup> Higher penetration justified as no pharmacological treatment currently available	
<sup>3</sup> Revenue/year/patient - based on currently available treatments cost per year	
<sup>4</sup> Peak sales - treatment revenue/year/patient x total patients x peak market share	
<sup>5</sup> Probability of success - Aviptadil for treatment of ALI is scheduled to enter phase 2 trials in H12017	

Source: Research Dynamics

## DETAILED FINANCIAL STATEMENTS

**Table 1: Relief Therapeutics Holding AG (RLF) – Historical Income Statements, Financial Projections**

FY end December 31  
CHF in thousands

	H1 2016 A	H2 2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Revenue																
Aviptadil-Sarcoidosis	-	-	-	-	-	-	54,013	111,686	138,563	179,062	222,110	255,085	290,021	272,478	211,201	203,690
Atexakin Alfa-DN	-	-	-	-	-	-	-	184,841	382,855	594,694	615,774	850,053	1,760,022	2,049,585	2,357,074	1,951,469
Aviptadil-ALI	-	-	-	-	-	-	-	57,132	98,443	162,824	210,391	260,963	314,675	348,445	432,110	372,102
<b>Total Revenues</b>	<b>335</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>54,013</b>	<b>353,659</b>	<b>619,861</b>	<b>936,581</b>	<b>1,048,274</b>	<b>1,366,101</b>	<b>2,364,718</b>	<b>2,670,507</b>	<b>3,000,385</b>	<b>2,527,261</b>
Operating expenses excluding D&A																
Service expense	971															
Personnel expense	206															
COGS		-	-	-	-	-	3,781	24,756	43,390	65,561	73,379	95,627	165,530	186,935	210,027	176,908
Sales & Marketing		-	-	-	-	-	2,701	17,683	30,993	46,829	52,414	68,305	118,236	133,525	150,019	126,363
G&A	28	500	3,000	3,000	3,000	3,000	2,161	14,146	24,794	37,463	41,931	50,000	50,000	50,000	50,000	50,000
R&D		-	10,000	15,000	20,000	25,000	22,000	15,000	20,000	25,000	30,000	50,000	55,000	60,000	70,000	55,000
Royalty to Merck	-	-	-	-	-	-	-	12,939	26,800	41,629	43,104	59,504	123,202	143,471	164,995	136,603
<b>EBITDA</b>	<b>(870)</b>	<b>(500)</b>	<b>(13,000)</b>	<b>(18,000)</b>	<b>(23,000)</b>	<b>(28,000)</b>	<b>23,371</b>	<b>269,134</b>	<b>473,884</b>	<b>720,099</b>	<b>807,446</b>	<b>1,042,665</b>	<b>1,852,751</b>	<b>2,096,575</b>	<b>2,355,344</b>	<b>1,982,387</b>
% margin		na	na	na	na	na	43%	76%	76%	77%	77%	76%	78%	79%	79%	78%
Amortization and depreciation expense	180	183	365	365	365	364	364	364	364	364	364	363	0	0	0	0
<b>EBIT</b>	<b>(1,050)</b>	<b>(683)</b>	<b>(13,365)</b>	<b>(18,365)</b>	<b>(23,365)</b>	<b>(28,364)</b>	<b>23,007</b>	<b>268,770</b>	<b>473,520</b>	<b>719,735</b>	<b>807,083</b>	<b>1,042,302</b>	<b>1,852,750</b>	<b>2,096,575</b>	<b>2,355,343</b>	<b>1,982,387</b>
Interest income	1	1	13	41	77	65	61	354	1,082	2,257	3,791	5,671	8,534	12,477	17,004	21,495
Interest expense	143	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Profit / (Loss) before taxes</b>	<b>(1,192)</b>	<b>(682)</b>	<b>(13,352)</b>	<b>(18,324)</b>	<b>(23,287)</b>	<b>(28,299)</b>	<b>23,068</b>	<b>269,124</b>	<b>474,602</b>	<b>721,992</b>	<b>810,874</b>	<b>1,047,972</b>	<b>1,861,284</b>	<b>2,109,052</b>	<b>2,372,347</b>	<b>2,003,882</b>

Source: Company reports and Research Dynamics estimates.

**Table 2: Relief Therapeutics Holding AG (RLF) – Historical Balance Sheets, Financial Projections**

FY end December 31  
CHF in thousands

	H1 2016 A	H2 2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Property, plant and equipment	12	11	9	7	6	4	4	3	2	2	1	1	1	1	1	0
Goodwill	18,797	18,797	18,797	18,797	18,797	18,797	18,797	18,797	18,797	18,797	18,797	18,797	18,797	18,797	18,797	18,797
Intangible assets	3,632	3,450	3,087	2,724	2,361	1,998	1,634	1,271	908	545	182	(182)	(182)	(182)	(182)	(182)
Loans and other non-current assets	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
<b>Non-current assets</b>	<b>22,445</b>	<b>22,262</b>	<b>21,897</b>	<b>21,532</b>	<b>21,167</b>	<b>20,803</b>	<b>20,439</b>	<b>20,075</b>	<b>19,711</b>	<b>19,348</b>	<b>18,984</b>	<b>18,621</b>	<b>18,620</b>	<b>18,620</b>	<b>18,620</b>	<b>18,620</b>
Trade receivables	161	-	-	-	-	-	4,439	29,068	50,947	76,979	86,160	112,282	194,360	219,494	246,607	207,720
Tax receivables	48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other current assets and other receivables	92	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cash and cash equivalents	131	301	10,314	22,355	39,432	12,961	35,894	246,985	618,808	1,186,642	1,846,540	2,689,967	4,137,159	5,844,702	7,758,247	9,437,779
<b>Current assets</b>	<b>432</b>	<b>301</b>	<b>10,314</b>	<b>22,355</b>	<b>39,432</b>	<b>12,961</b>	<b>40,334</b>	<b>276,053</b>	<b>669,755</b>	<b>1,263,621</b>	<b>1,932,700</b>	<b>2,802,250</b>	<b>4,331,519</b>	<b>6,064,196</b>	<b>8,004,854</b>	<b>9,645,499</b>
<b>TOTAL ASSETS</b>	<b>22,877</b>	<b>22,563</b>	<b>32,211</b>	<b>43,887</b>	<b>60,599</b>	<b>33,764</b>	<b>60,773</b>	<b>296,128</b>	<b>689,466</b>	<b>1,282,969</b>	<b>1,951,684</b>	<b>2,820,870</b>	<b>4,350,139</b>	<b>6,082,816</b>	<b>8,023,474</b>	<b>9,664,119</b>
Share Capital	6,548	11,917	34,917	64,917	104,917	105,917	105,917	105,917	105,917	105,917	105,917	105,917	105,917	105,917	105,917	105,917
Reserves	35,336	35,336	35,336	35,336	35,336	35,336	35,336	35,336	35,336	35,336	35,336	35,336	35,336	35,336	35,336	35,336
Retained Earnings	(25,368)	(26,050)	(39,402)	(57,726)	(81,014)	(109,313)	(86,245)	145,610	534,783	1,126,817	1,791,734	2,651,071	4,177,324	5,906,747	7,852,071	9,495,254
<b>Total Equity</b>	<b>16,516</b>	<b>21,202</b>	<b>30,850</b>	<b>42,526</b>	<b>59,239</b>	<b>31,940</b>	<b>55,008</b>	<b>286,862</b>	<b>676,036</b>	<b>1,268,069</b>	<b>1,932,986</b>	<b>2,792,323</b>	<b>4,318,576</b>	<b>6,047,999</b>	<b>7,993,324</b>	<b>9,636,507</b>
Non-current borrowings	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Defined benefit obligation	436	436	436	436	436	436	436	436	436	436	436	436	436	436	436	436
Deferred tax liabilities	678	678	678	678	678	678	678	678	678	678	678	678	678	678	678	678
<b>Non-current liabilities</b>	<b>1,114</b>	<b>1,114</b>	<b>1,114</b>	<b>1,114</b>	<b>1,114</b>	<b>1,114</b>	<b>1,114</b>	<b>1,114</b>	<b>1,114</b>	<b>1,114</b>	<b>1,114</b>	<b>1,114</b>	<b>1,114</b>	<b>1,114</b>	<b>1,114</b>	<b>1,114</b>
Trade payables	1,456	247	247	247	247	710	4,651	8,152	12,317	13,786	17,583	27,433	30,449	33,702	29,036	26,498
Current borrowings	3,397	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tax payables	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other current payables and liabilities	393	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Current liabilities</b>	<b>5,247</b>	<b>247</b>	<b>247</b>	<b>247</b>	<b>247</b>	<b>710</b>	<b>4,651</b>	<b>8,152</b>	<b>12,317</b>	<b>13,786</b>	<b>17,583</b>	<b>27,433</b>	<b>30,449</b>	<b>33,702</b>	<b>29,036</b>	<b>26,498</b>
<b>TOTAL EQUITY AND LIABILITIES</b>	<b>22,877</b>	<b>22,563</b>	<b>32,211</b>	<b>43,887</b>	<b>60,599</b>	<b>33,764</b>	<b>60,773</b>	<b>296,128</b>	<b>689,466</b>	<b>1,282,969</b>	<b>1,951,684</b>	<b>2,820,870</b>	<b>4,350,139</b>	<b>6,082,816</b>	<b>8,023,474</b>	<b>9,664,119</b>

Source: Company reports and Research Dynamics estimates.

**Table 3: Relief Therapeutics Holding AG (RLF) – Historical Cash Flow Statement, Financial Projections**

FY end December 31  
CHF in thousands

	H1 2016 A	H2 2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Cash Flow from Operations																
Net Income		(682)	(13,352)	(18,324)	(23,287)	(28,299)	23,068	231,854	389,174	592,034	664,917	859,337	1,526,253	1,729,423	1,945,325	1,643,183
Adjustments																
Add: Depreciation & Write offs		183	365	365	365	364	364	364	364	364	364	363	0	0	0	0
Less: Change in Receivables		(301)	-	-	-	-	4,439	24,628	21,880	26,032	9,180	26,123	82,078	25,133	27,113	(38,887)
Add: Change in Current Liabilities		(1,603)	-	-	-	464	3,941	3,501	4,165	1,469	3,798	9,849	3,016	3,254	(4,666)	(2,538)
<b>Cash from operations</b>	<b>(2,376)</b>	<b>(1,802)</b>	<b>(12,987)</b>	<b>(17,959)</b>	<b>(22,923)</b>	<b>(27,471)</b>	<b>22,933</b>	<b>211,090</b>	<b>371,823</b>	<b>567,834</b>	<b>659,898</b>	<b>843,427</b>	<b>1,447,191</b>	<b>1,707,543</b>	<b>1,913,545</b>	<b>1,679,532</b>
Cash Flow from Investing																
Purchase (sale) of equipment		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Cash from Investing Activities</b>	<b>(346)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
Cash Flow from Financing																
Proceeds from equity, net		1,972	23,000	30,000	40,000	1,000	-	-	-	-	-	-	-	-	-	-
<b>Cash from Financing Activities</b>	<b>1,674</b>	<b>1,972</b>	<b>23,000</b>	<b>30,000</b>	<b>40,000</b>	<b>1,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
Beginning cash balance		131	301	10,314	22,355	39,432	12,961	35,894	246,985	618,808	1,186,642	1,846,540	2,689,967	4,137,159	5,844,702	7,758,247
Increase (decrease) in cash		170	10,013	12,041	17,077	(26,471)	22,933	211,090	371,823	567,834	659,898	843,427	1,447,191	1,707,543	1,913,545	1,679,532
<b>Ending cash balance</b>	<b>131</b>	<b>301</b>	<b>10,314</b>	<b>22,355</b>	<b>39,432</b>	<b>12,961</b>	<b>35,894</b>	<b>246,985</b>	<b>618,808</b>	<b>1,186,642</b>	<b>1,846,540</b>	<b>2,689,967</b>	<b>4,137,159</b>	<b>5,844,702</b>	<b>7,758,247</b>	<b>9,437,779</b>

Source: Company reports and Research Dynamics estimates.

**Table 4: Relief Therapeutics Holding AG (RLF) – Aviptadil Estimated Sales – sarcoidosis**

FY end December 31

CHF in thousands, except the patients and population data

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
US Population	321,368,864	323,995,528	326,625,791	329,256,465	331,883,986	334,503,458	337,108,968	339,698,079	342,267,302	344,814,299	347,334,912	349,825,585	352,281,475	354,698,370	357,072,830	359,402,194
Patients with Sarcoidosis	64,274	64,799	65,325	65,851	66,377	66,901	67,422	67,940	68,453	68,963	69,467	69,965	70,456	70,940	71,415	71,880
% of total population	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%
EU Population	509,164,624	510,048,018	510,899,856	511,705,332	512,474,771	513,200,555	513,891,835	514,546,003	515,162,090	515,754,662	516,328,506	516,885,778	517,431,929	517,964,586	518,499,055	519,018,285
Patients with Sarcoidosis	101,833	102,010	102,180	102,341	102,495	102,640	102,778	102,909	103,032	103,151	103,266	103,377	103,486	103,593	103,700	103,804
% of total population	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%
Total Patients	166,107	166,809	167,505	168,192	168,872	169,541	170,200	170,849	171,485	172,114	172,733	173,342	173,942	174,533	175,115	175,684
Patients seeking treatment	83,054	83,405	83,753	84,096	84,436	84,771	85,100	85,425	85,743	86,057	86,367	86,671	86,971	87,267	87,558	87,842
Aviptadil penetration rate	0%	0%	0%	0%	0%	0%	5%	10%	12%	15%	18%	20%	22%	20%	15%	14%
Patients receiving Aviptadil	-	-	-	-	-	-	4,255	8,542	10,289	12,909	15,546	17,334	19,134	17,453	13,134	12,298
Average annual revenue per patient	-	-	-	-	-	-	12,694	13,075	13,467	13,871	14,287	14,716	15,157	15,612	16,080	16,563
<b>Total yearly revenue</b>	-	-	-	-	-	-	<b>54,013</b>	<b>111,686</b>	<b>138,563</b>	<b>179,062</b>	<b>222,110</b>	<b>255,085</b>	<b>290,021</b>	<b>272,478</b>	<b>211,201</b>	<b>203,690</b>

Source: Research Dynamics estimates.

**Table 5: Relief Therapeutics Holding AG (RLF) – Atexakin alfa Estimated Sales – Diabetic neuropathy and Postherpatic neuralgia**

FY end December 31

CHF in thousands, except the patients and population data

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
US Population	321,368,864	323,995,528	326,625,791	329,256,465	331,883,986	334,503,458	337,108,968	339,698,079	342,267,302	344,814,299	347,334,912	349,825,585	352,281,475	354,698,370	357,072,830	359,402,194
Patients with diabetes	39,700,000	40,024,482	40,349,410	40,674,387	40,998,976	41,322,570	41,644,439	41,964,282	42,281,669	42,596,310	42,907,691	43,215,374	43,518,760	43,817,329	44,110,656	44,398,412
% of total population	12.35%	12.35%	12.35%	12.35%	12.35%	12.35%	12.35%	12.35%	12.35%	12.35%	12.35%	12.35%	12.35%	12.35%	12.35%	12.35%
Patients with painful diabetic neuropathy	4,367,000	4,402,693	4,438,435	4,474,183	4,509,887	4,545,483	4,580,888	4,616,071	4,650,984	4,685,594	4,719,846	4,753,691	4,787,064	4,819,906	4,852,172	4,883,825
% of diabetics with diabetic neuropathy	11%	11%	11%	11%	11%	11%	11%	11%	11%	11%	11%	11%	11%	11%	11%	11%
Patients with diabetic neuropathy seeking treatment	2,183,500	2,201,347	2,219,218	2,237,092	2,254,944	2,272,742	2,290,444	2,308,036	2,325,492	2,342,797	2,359,923	2,376,846	2,393,532	2,409,953	2,426,086	2,441,913
Patients with Herpes Zoster	1,028,380	1,036,786	1,045,203	1,053,621	1,062,029	1,070,411	1,078,749	1,087,034	1,095,255	1,103,406	1,111,472	1,119,442	1,127,301	1,135,035	1,142,633	1,150,087
% of total population	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Patients with Postherpatic neuralgia	102,838	103,679	104,520	105,362	106,203	107,041	107,875	108,703	109,526	110,341	111,147	111,944	112,730	113,504	114,263	115,009
% of Herpes Zoster patients	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%
Total addressable population	2,286,338	2,305,026	2,323,738	2,342,454	2,361,147	2,379,783	2,398,319	2,416,739	2,435,018	2,453,138	2,471,070	2,488,790	2,506,262	2,523,457	2,540,349	2,556,922
Atexakin Alfa penetration rate	0%	0%	0%	0%	0%	0%	0%	1%	2%	3%	3%	4%	8%	9%	10%	8%
Patients receiving Atexakin Alfa	-	-	-	-	-	-	-	23,080	46,510	70,284	70,798	95,074	191,483	216,896	242,609	195,353
Average annual revenue per patient	-	-	-	-	-	-	-	2,985	3,075	3,167	3,262	3,360	3,461	3,564	3,671	3,781
<b>US revenue</b>	-	-	-	-	-	-	-	<b>68,898</b>	<b>143,003</b>	<b>222,584</b>	<b>230,937</b>	<b>319,428</b>	<b>662,642</b>	<b>773,104</b>	<b>890,697</b>	<b>738,723</b>
EU Population	509,164,624	510,048,018	510,899,856	511,705,332	512,474,771	513,200,555	513,891,835	514,546,003	515,162,090	515,754,662	516,328,506	516,885,778	517,431,929	517,964,586	518,499,055	519,018,285
Patients with diabetes	45,824,816	45,904,322	45,980,987	46,053,480	46,122,729	46,188,050	46,250,265	46,309,140	46,364,588	46,417,920	46,469,566	46,519,720	46,568,874	46,616,813	46,664,915	46,711,646
% of total population	9%	9%	9%	9%	9%	9%	9%	9%	9%	9%	9%	9%	9%	9%	9%	9%
Patients with diabetic neuropathy	9,407,730	9,452,168	9,496,344	9,540,065	9,583,388	9,626,168	9,668,417	9,710,076	9,751,088	9,791,565	9,831,498	9,870,860	9,909,640	9,947,756	9,985,313	10,022,106
% of diabetics with diabetic neuropathy	11%	11%	11%	11%	11%	11%	11%	11%	11%	11%	11%	11%	11%	11%	11%	11%
Patients with diabetic neuropathy seeking treatment	4,703,865	4,726,084	4,748,172	4,770,033	4,791,694	4,813,084	4,834,209	4,855,038	4,875,544	4,895,783	4,915,749	4,935,430	4,954,820	4,973,878	4,992,657	5,011,053
Patients with Herpes Zoster	642,738	647,991	653,252	658,513	663,768	669,007	674,218	679,396	684,535	689,629	694,670	699,651	704,563	709,397	714,146	718,804
% of total population	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Patients with Postherpatic neuralgia	64,274	64,799	65,325	65,851	66,377	66,901	67,422	67,940	68,454	68,963	69,467	69,965	70,456	70,940	71,415	71,880
% of Herpes Zoster patients	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%
Total addressable population	4,768,139	4,790,883	4,813,497	4,835,884	4,858,071	4,879,985	4,901,631	4,922,978	4,943,998	4,964,746	4,985,216	5,005,395	5,025,276	5,044,818	5,064,072	5,082,933
Atexakin Alfa penetration rate	0%	0%	0%	0%	0%	0%	0%	1%	2%	3%	3%	4%	8%	9%	10%	8%
Patients receiving Atexakin Alfa	-	-	-	-	-	-	-	48,550	97,511	146,873	147,472	197,417	396,386	447,649	499,266	400,884
Average annual revenue per patient	-	-	-	-	-	-	-	2,388	2,460	2,534	2,610	2,688	2,768	2,852	2,937	3,025
<b>EU revenue</b>	-	-	-	-	-	-	-	<b>115,943</b>	<b>239,852</b>	<b>372,110</b>	<b>384,836</b>	<b>530,624</b>	<b>1,097,381</b>	<b>1,276,481</b>	<b>1,466,377</b>	<b>1,212,747</b>
<b>Total yearly revenue</b>	-	-	-	-	-	-	-	<b>184,841</b>	<b>382,855</b>	<b>594,694</b>	<b>615,774</b>	<b>850,053</b>	<b>1,760,022</b>	<b>2,049,585</b>	<b>2,357,074</b>	<b>1,951,469</b>

Source: Research Dynamics estimates.

**Table 6: Relief Therapeutics Holding AG (RLF) – Aviptadil Estimated Sales – Acute lung injury**

FY end December 31

CHF in thousands, except the patients and population data

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
US Population	321,368,864	323,995,528	326,625,791	329,256,465	331,883,986	334,503,458	337,108,968	339,698,079	342,267,302	344,814,299	347,334,912	349,825,585	352,281,475	354,698,370	357,072,830	359,402,194
Patients with ALI	200,000	201,635	203,272	204,909	206,544	208,174	209,796	211,407	213,006	214,591	216,160	217,710	219,238	220,742	222,220	223,670
% of total population	0.06%	0.06%	0.06%	0.06%	0.06%	0.06%	0.06%	0.06%	0.06%	0.06%	0.06%	0.06%	0.06%	0.06%	0.06%	0.06%
EU Population	509,164,624	510,048,018	510,899,856	511,705,332	512,474,771	513,200,555	513,891,835	514,546,003	515,162,090	515,754,662	516,328,506	516,885,778	517,431,929	517,964,586	518,499,055	519,018,285
Patients with ALI	316,872	317,422	317,952	318,454	318,932	319,384	319,814	320,221	320,605	320,974	321,331	321,678	322,017	322,349	322,682	323,005
% of total population	0.06%	0.06%	0.06%	0.06%	0.06%	0.06%	0.06%	0.06%	0.06%	0.06%	0.06%	0.06%	0.06%	0.06%	0.06%	0.06%
Total patients	516,872	519,057	521,224	523,363	525,476	527,558	529,610	531,628	533,611	535,565	537,491	539,388	541,255	543,091	544,902	546,675
Aviptadil penetration rate	0%	0%	0%	0%	0%	0%	0%	3%	5%	8%	10%	12%	14%	15%	18%	15%
Patients receiving Aviptadil	-	-	-	-	-	-	-	15,949	26,681	42,845	53,749	64,727	75,776	81,464	98,082	82,001
Average annual revenue per patient	-	-	-	-	-	-	-	3,582	3,690	3,800	3,914	4,032	4,153	4,277	4,406	4,538
<b>Total yearly revenue (\$m)</b>	-	-	-	-	-	-	-	<b>57,132</b>	<b>98,443</b>	<b>162,824</b>	<b>210,391</b>	<b>260,963</b>	<b>314,675</b>	<b>348,445</b>	<b>432,110</b>	<b>372,102</b>

Source: Research Dynamics estimates.

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