Valuation of 554-001

(Idiopathic Pulmonary Fibrosis)

Modelling and key assumptions

September 2024

IDIOPATHIC PULMONARY FIBROSIS (IPF): A DISABLING CONDITION WITH A POOR PROGNOSIS

- Fibrosis results from excessive deposition of extracellular matrix, often linked to disruption of wound repair mechanisms.

- IPF is characterised by a progressive and irreversible fibrosis of the lung parenchyma. First symptoms are a persistent dry cough and increasing dyspnea often associated with tiredness. This condition has a chronic, progressive course, with possible acute exacerbations.

- IPF leads to progressive worsening of the alveolar structure and a drastic reduction in respiratory capacity. Its long term evolution has a direct impact on the quality of life and leads to increasing loss of independence. The median survival after diagnosis is between 2 and 5 years.

- Although the exact cause is unknown, IPF has been linked to smoking, exposure to certain types of dust (such as metal or wood dust), viral infections... If not properly understood, familial history represents a major risk factor.

- Comorbidities: IPF patients are often affected by other conditions (gastroesophageal reflux disease, diabetes, Obstructive sleep apnea).

IPF: EPIDEMIOLOGY AND DISEASE MANAGEMENT

- Heterogeneity in epidemiologic studies means the full impact of the disease is unclear
  - Global average of incidence (new cases): 0.09-1.30 per 10,000 people
  - Global average of prevalence (people with diagnosed IPF): 0.33-4.51 per 10,000 people

- Disease management consist mainly in limiting the daily impact
  - Smoking cessation
  - Pulmonary rehabilitation
  - Oxygen supplementation

- Therapeutic options are limited with only two approved drugs with limited efficacy (slow the lung degradation but do not show curative benefits)
  - Ofev (Nintedanib) marketed by Boehringer Ingelheim
  - Esbriet (Pirfenidone) marketed by Roche

- Ultimate lung damage requires a lung transplantation
  - Lack of donors
  - Long term treatments for graft tolerance

554-001 (Tritoqualine): A POTENTIAL TO BECOME A STANDARD OF CARE IN IPF

- Tritoqualine: a well-known molecule for treating allergies
  - An histidine decarboxylase inhibitor with other biological interactions
  - Multifunctional ligand showing interaction at several levels of the fibrotic cascade
  - Millions of patients treated
  - Excellent safety profile
  - Interesting candidate for IPF → ongoing repositioning to confirm its potential as central therapy

- Preclinical data show a strong reduction of fibrosis in pulmonary parenchyma and positive trends in reliable biological markers of IPF (eg. Hydroxyproline, CFTR channel activity)

- The most active drug compared to approved drugs (Pirfenidone and Nintedanib)
  - Better impact on biological markers and improved lung histology in animal models
  - 554-001 allows a likely benefit on symptoms when Ofev and Esbriet limit disease progression

- Safety: a competitive advantage that will reinforce a likely domination already acquired on efficacy
  - Both marketed drugs induce critical side effects that make long term-prescribing inappropriate (diarrhea, nausea, rash, pain…)
  - Since its first approval Tritoqualine has been shown to be well tolerated (over a 40-year prescription period)

VALUATION OF 554-001: KEY ASSUMPTIONS (RISK ADJUSTED NET PRESENT VALUE = rNPV)

- Scenario: licensing global rights to a large (bio)pharmaceutical company after Phase II
  - Upfront payment of EUR 60m / Clinical and regulatory milestones of EUR 150m / Commercial milestones EUR 210m
  - Double digit royalties rates: 12 to 18% based on developed sales levels thresholds

- Targeted countries/geographical areas (according to the IP situation)
  - Europe Top 5 countries (Germany, France, UK, Italy, Spain)
  - Northern America (US + Canada)
  - Asia (Japan + China)

- Addressable population: based on an average prevalence figure of 2.7 per 10,000 globally, a figure consistent with the estimated number of patients in Europe and in the US.

- Market Share: 10% at peak sales. 554-001 has the potential to become a best-in-class product but diagnosis of IPF remains a real challenge and existing products are marketed by global pharmaceutical companies with an established notoriety.

- Orphan Drug Designation (offers a marketing exclusivity after approval)
  - Granted in Europe (10-year period of exclusivity after approval)
  - Granted in Northern America (7-year period of exclusivity after approval)

VALUATION OF 554-001: KEY ASSUMPTIONS (2)

- Clinical development: 52-week treatment (similar to trials carried out for approved therapies)
  - Very conservative timetable
  - Alternative scenario (no modelling available): 3-month treatment since benefits are observed at week 12 with tritoqualine.

- Pricing: based on the pricing of total cost of Esbriet and Ofev
  - Europe: EUR 25,000 per patient/year
  - Northern America: USD 50,000 per patient/year
  - Japan: EUR 25,000 per patient/year
  - China: EUR 20,000 per patient/year

- Probability of success
  - Excellent safety profile secures Phase I tolerance/toxicity issues often revealing in early clinical studies
  - Preclinical data support a realistic 15% figure in line with common value accepted for drug in early Phase II development

- Discount rate: 15%
  - Biotech/Pharma industry is know for the risk-associated with drug development (large number of failure during clinical validation due to safety or efficacy issues). A 15% discount rate is commonly used in rNPV models of biotech companies.
  - IPF is a complex condition with a poor number of approved drugs showing limited therapeutic benefits

rNPV of 554-001 in Europe (Top 5 countries*)

- Market share: 10%
- Orphan Drug Designation → marketing exclusivity until 2041E

EUROPE Top 5		2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E	2034E	2035E	2036E	2037E	2038E	2039E	2040E	2041E	2042E	2043E	2044E
Status			*IIa*	*IIa/IIb*	*IIb*	*II/III*	*II/III*	*II/III*	*AMM*													
Population (x1000)		328 281	328 938	329 596	330 255	330 915	331 577	332 240	332 905	333 571	334 238	334 906	335 576	336 247	336 920	337 594	338 269	338 945	339 623	340 302	340 983	341 665
Prevalence		0,027%	0,027%	0,028%	0,028%	0,028%	0,028%	0,028%	0,028%	0,028%	0,029%	0,029%	0,029%	0,029%	0,029%	0,029%	0,029%	0,030%	0,030%	0,030%	0,030%	0,030%
Adressable patients		89 524	90 152	90 784	91 420	92 061	92 707	93 357	94 011	94 670	95 334	96 002	96 675	97 353	98 035	98 722	99 414	100 111	100 813	101 520	102 231	102 948
Market share		-	-	-	-	-	-	-	1,5%	3,0%	5,0%	7,0%	9,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	7,0%	5,0%	4,0%
Treated patients		-	-	-	-	-	-	-	1 410	2 840	4 767	6 720	8 701	9 735	9 803	9 872	9 941	10 011	10 081	7 106	5 112	4 118
Selling price (EUR)	25 000																					
Developed sales (EURm)		**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**35,3**	**71,0**	**119,2**	**168,0**	**217,5**	**243,4**	**245,1**	**246,8**	**248,5**	**250,3**	**252,0**	**177,7**	**127,8**	**102,9**
Upfront		-	-	-	20,0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Milestones		-	-	-	-	-	-	20,0	20,0	-	-	-	-	-	-	-	-	-	-	-	-	-
Royalties		-	-	-	-	-	-	-	-	8,5	14,3	20,2	26,1	29,2	29,4	29,6	29,8	30,0	30,3	21,3	15,3	12,4
Average royalties yield		-	-	-	-	-	-	-	-	12,0%	12,0%	12,0%	12,0%	12,0%	12,0%	12,0%	12,0%	12,0%	12,0%	12,0%	12,0%	12,0%
H4 Pharma revenues (EURm)		**0,0**	**0,0**	**0,0**	**20,0**	**0,0**	**0,0**	**20,0**	**20,0**	**8,5**	**14,3**	**20,2**	**26,1**	**29,2**	**29,4**	**29,6**	**29,8**	**30,0**	**30,3**	**21,3**	**15,3**	**12,4**
R&D		-	-	-	-	1,6	1,6	1,6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Licence		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cash flow		**0,0**	**0,0**	**0,0**	**0,0**	**-1,6**	**-1,6**	**18,4**	**0,0**	**0,0**	**20,0**	**20,0**	**8,5**	**14,3**	**20,2**	**26,1**	**29,2**	**29,4**	**29,6**	**29,8**	**30,0**	**30,3**
Tax	15%	-	-	-	2,3	-	-	3,0	3,0	1,3	2,1	3,0	3,9	4,4	4,4	4,4	4,5	4,5	4,5	3,2	2,3	1,9
Cash flow net		**0,0**	**0,0**	**0,0**	**0,0**	**-1,6**	**-1,6**	**16,1**	**0,0**	**0,0**	**17,0**	**17,0**	**7,2**	**12,2**	**17,1**	**22,2**	**24,8**	**25,0**	**25,2**	**25,4**	**25,5**	**25,8**
Discount factor	15%	1,000	0,870	0,756	0,658	0,572	0,497	0,432	0,376	0,327	0,284	0,247	0,215	0,187	0,163	0,141	0,123	0,107	0,093	0,081	0,070	0,061
Discounted flows	**0,0**	**0,0**	**-1,4**	**-1,2**	**10,6**	**0,0**	**0,0**	**7,3**	**6,4**	**2,4**	**3,5**	**4,2**	**4,8**	**4,6**	**4,1**	**3,6**	**3,1**	**2,7**	**2,4**	**1,5**	**0,9**	**0,6**
NPV	**60,1**																					
Probability of success	15%																					
rNPV	**9,0**																					

* Germany, France, UK, Italy, Spain

rNPV of 554-001 in Northern America (US + Canada)

- Market share: 10%
- Orphan Drug Designation → marketing exclusivity until 2039E

USA + Canada		2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E	2034E	2035E	2036E	2037E	2038E	2039E	2040E	2041E	2042E	2043E	2044E
Status		*o*	*IIa*	*IIa*	*IIa/IIb*	*IIb*	*II/III*	*II/III*	*II/III*	*NDA*												
Population (x1000)		375 962	377 841	379 731	381 629	383 537	385 455	387 382	389 319	391 266	393 222	395 188	397 164	399 150	401 146	403 152	405 167	407 193	409 229	411 275	413 332	415 398
Prevalence		0,027%	0,027%	0,028%	0,028%	0,028%	0,028%	0,028%	0,028%	0,028%	0,029%	0,029%	0,029%	0,029%	0,029%	0,029%	0,029%	0,030%	0,030%	0,030%	0,030%	0,030%
Adressable patients		102 527	103 555	104 593	105 642	106 701	107 771	108 851	109 942	111 044	112 158	113 282	114 418	115 565	116 723	117 893	119 075	120 269	121 475	122 692	123 922	125 165
Market share		-	-	-	-	-	-	-	0,0%	1,5%	3,0%	5,0%	7,0%	9,0%	10,0%	10,0%	10,0%	7,0%	5,0%	4,0%	3,0%	3,0%
Treated patients		-	-	-	-	-	-	-	-	1 666	3 365	5 664	8 009	10 401	11 672	11 789	11 908	8 419	6 074	4 908	3 718	3 755
Selling price (USD)	50 000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EUR/USD	1,12	1,12	1,12	1,12	1,12	1,12	1,12	1,12	1,12	1,12	1,12	1,12	1,12	1,12	1,12	1,12	1,12	1,12	1,12	1,12	1,12	1,12
Developed sales (EURm)		0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	74,4	150,2	252,9	357,6	464,3	521,1	526,3	531,6	375,8	271,1	219,1	166,0	167,6
Upfront		-	-	-	-	-	-	25,0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Milestones		-	-	-	-	-	-	-	25,0	-	-	25,0	25,0	50,0	80,0	-	-	-	-	-	-	-
Royalties		-	-	-	-	-	-	-	-	-	-	-	8,9	18,0	30,4	46,1	62,1	70,7	71,4	72,2	48,9	33,2
Average royalties yield		-	-	-	-	-	-	-	-	-	-	-	12,0%	12,0%	12,0%	12,9%	13,4%	13,6%	13,6%	13,6%	13,0%	12,2%
H4 Pharma revenues (EURm)		0,0	0,0	0,0	0,0	0,0	0,0	25,0	25,0	0,0	0,0	25,0	33,9	68,0	110,4	46,1	62,1	70,7	71,4	72,2	48,9	33,2
R&D		-	-	-	-	2,4	2,4	2,4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Licence	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cash flow		0,0	0,0	0,0	0,0	-2,4	-2,4	22,6	25,0	0,0	0,0	25,0	33,9	68,0	110,4	46,1	62,1	70,7	71,4	72,2	48,9	33,2
Tax	15%	-	-	-	-	-	-	2,7	3,8	-	-	3,8	5,1	10,2	16,6	6,9	9,3	10,6	10,7	10,8	7,3	5,0
Cash flow net		0,0	0,0	0,0	0,0	-2,4	-2,4	19,9	21,3	0,0	0,0	21,3	28,8	57,8	93,9	39,2	52,8	60,1	60,7	61,4	41,5	28,2
Discount factor	15%	-	-	-	1,000	0,870	0,756	0,658	0,572	0,497	0,432	0,376	0,327	0,284	0,247	0,215	0,187	0,163	0,141	0,123	0,107	0,093
Discounted flows		0,0	0,0	0,0	0,0	-2,1	-1,8	13,1	12,1	0,0	0,0	8,0	9,4	16,4	23,2	8,4	9,9	9,8	8,6	7,5	4,4	2,6
NPV	**133,7**																					
Probability of success	15%																					
rNPV	**20,1**																					

rNPV of 554-001 in Japan

- Market share: 9%
- Patent expiration: 2037E

Japan		2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E	2034E	2035E	2036E	2037E	2038E	2039E	2040E	2041E	2042E	2043E	2044E
Status		*o*	*o*	*IIa*	*IIa*	*IIa/IIb*	*IIb*	*II/III*	*II/III*	*II/III*	*NDA*											
Population (x1000)		125 601	125 852	126 104	126 356	126 609	126 862	127 116	127 370	127 625	127 880	128 136	128 392	128 649	128 906	129 164	129 422	129 681	129 940	130 200	130 461	130 722
Prevalence		0,027%	0,027%	0,028%	0,028%	0,028%	0,028%	0,028%	0,028%	0,028%	0,029%	0,029%	0,029%	0,029%	0,029%	0,029%	0,029%	0,030%	0,030%	0,030%	0,030%	0,030%
Adressable patients		34 252	34 492	34 734	34 978	35 223	35 470	35 718	35 969	36 221	36 475	36 730	36 988	37 247	37 508	37 771	38 036	38 303	38 571	38 842	39 114	39 388
Market share		-	-	-	-	-	-	-	-	-	1,5%	3,0%	6,0%	9,0%	10,0%	9,0%	7,0%	5,0%	4,0%	3,0%	3,0%	3,0%
Treated patients		-	-	-	-	-	-	-	-	-	547	1 102	2 219	3 352	3 751	3 399	2 663	1 915	1 543	1 165	1 173	1 182
Selling price (EUR)	25 000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Developed sales (EURm)		**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**13,7**	**27,5**	**55,5**	**83,8**	**93,8**	**85,0**	**66,6**	**47,9**	**38,6**	**29,1**	**29,3**	**29,5**
Upfront		-	-	-	10,0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Milestones		-	-	-	-	-	5,0	-	-	5,0	5,0	-	-	-	-	-	-	-	-	-	-	-
Royalties		-	-	-	-	-	-	-	-	-	1,6	3,3	6,7	10,1	11,3	10,2	8,0	5,7	4,6	3,5	3,5	3,5
Average royalties yield		-	-	-	-	-	-	-	-	-	12,0%	12,0%	12,0%	12,0%	12,0%	12,0%	12,0%	12,0%	12,0%	12,0%	12,0%	12,0%
H4 Pharma revenues (EURm)		**0,0**	**0,0**	**0,0**	**10,0**	**0,0**	**5,0**	**0,0**	**0,0**	**5,0**	**6,6**	**3,3**	**6,7**	**10,1**	**11,3**	**10,2**	**8,0**	**5,7**	**4,6**	**3,5**	**3,5**	**3,5**
R&D		-	-	1,6	1,6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Licence	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cash flow		**0,0**	**0,0**	**-1,6**	**8,4**	**0,0**	**5,0**	**0,0**	**0,0**	**5,0**	**6,6**	**3,3**	**6,7**	**10,1**	**11,3**	**10,2**	**8,0**	**5,7**	**4,6**	**3,5**	**3,5**	**3,5**
Tax	15%	-	-	-	1,0	-	0,8	-	-	0,8	1,0	0,5	1,0	1,5	1,7	1,5	1,2	0,9	0,7	0,5	0,5	0,5
Cash flow net		**0,0**	**0,0**	**-1,6**	**7,4**	**0,0**	**4,3**	**0,0**	**0,0**	**4,3**	**5,6**	**2,8**	**5,7**	**8,5**	**9,6**	**8,7**	**6,8**	**4,9**	**3,9**	**3,0**	**3,0**	**3,0**
Discount factor	15%	1,000	0,870	0,756	0,658	0,572	0,497	0,432	0,376	0,327	0,284	0,247	0,215	0,187	0,163	0,141	0,123	0,107	0,093	0,081	0,070	0,061
Discounted flows		**0,0**	**0,0**	**-1,2**	**4,9**	**0,0**	**2,1**	**0,0**	**0,0**	**1,4**	**1,6**	**0,7**	**1,2**	**1,6**	**1,6**	**1,2**	**0,8**	**0,5**	**0,4**	**0,2**	**0,2**	**0,2**
NPV	**17,4**																					
Probability of success	15%																					
rNPV	**2,6**																					

rNPV of 554-001 in China

- Market share: 5%
- Patent expiration: 2037E

China		2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E	2034E	2035E	2036E	2037E	2038E	2039E	2040E	2041E	2042E	2043E	2044E
Status		*o*	*o*	*IIa*	*IIa*	*IIa/IIb*	*IIb*	*II/III*	*II/III*	*II/III*	*NDA*											
Population (x1000)		1 417 654	1 420 489	1 423 330	1 426 177	1 429 029	1 431 887	1 434 751	1 437 620	1 440 496	1 443 377	1 446 263	1 449 156	1 452 054	1 454 958	1 457 868	1 460 784	1 463 705	1 466 633	1 469 566	1 472 505	1 475 450
Prevalence		0,027%	0,027%	0,028%	0,028%	0,028%	0,028%	0,028%	0,028%	0,028%	0,029%	0,029%	0,029%	0,029%	0,029%	0,029%	0,029%	0,030%	0,030%	0,030%	0,030%	0,030%
Adressable patients		386 604	389 314	392 043	394 791	397 559	400 345	403 152	405 978	408 824	411 690	414 576	417 482	420 408	423 356	426 323	429 312	432 321	435 352	438 404	441 477	444 572
Market share		-	-	-	-	-	-	-	-	-	0,5%	1,0%	2,0%	4,0%	5,0%	3,0%	2,0%	2,0%	2,0%	2,0%	2,0%	2,0%
Treated patients		-	-	-	-	-	-	-	-	-	2 058	4 146	8 350	16 816	21 168	12 790	8 586	8 646	8 707	8 768	8 830	8 891
Selling price (EUR)	20 000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Developed sales (EURm)		**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**51,5**	**103,6**	**208,7**	**420,4**	**529,2**	**319,7**	**214,7**	**216,2**	**217,7**	**219,2**	**220,7**	**222,3**
Upfront		-	-	-	5,0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Milestones		-	-	-	-	-	5,0	-	-	5,0	10,0	-	-	50,0	80,0	-	-	-	-	-	-	-
Royalties		-	-	-	-	-	-	-	-	-	6,2	12,4	25,0	55,6	71,9	40,5	25,8	25,9	26,1	26,3	26,5	26,7
Average royalties yield		-	-	-	-	-	-	-	-	-	12,0%	12,0%	12,0%	13,2%	13,6%	12,7%	12,0%	12,0%	12,0%	12,0%	12,0%	12,0%
H4 Pharma revenues (EURm)		**0,0**	**0,0**	**0,0**	**5,0**	**0,0**	**5,0**	**0,0**	**0,0**	**5,0**	**16,2**	**12,4**	**25,0**	**105,6**	**151,9**	**40,5**	**25,8**	**25,9**	**26,1**	**26,3**	**26,5**	**26,7**
R&D		-	-	1,0	1,0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Licence	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cash flow		**0,0**	**0,0**	**-1,0**	**4,0**	**0,0**	**5,0**	**0,0**	**0,0**	**5,0**	**16,2**	**12,4**	**25,0**	**105,6**	**151,9**	**40,5**	**25,8**	**25,9**	**26,1**	**26,3**	**26,5**	**26,7**
Tax	15%	-	-	-	0,5	-	0,8	-	-	0,8	2,4	1,9	3,8	15,8	22,8	6,1	3,9	3,9	3,9	3,9	4,0	4,0
Cash flow net		**0,0**	**0,0**	**-1,0**	**3,6**	**0,0**	**4,3**	**0,0**	**0,0**	**4,3**	**13,7**	**10,6**	**21,3**	**89,7**	**129,1**	**34,4**	**21,9**	**22,0**	**22,2**	**22,4**	**22,5**	**22,7**
Discount factor	15%	1,000	0,870	0,756	0,658	0,572	0,497	0,432	0,376	0,327	0,284	0,247	0,215	0,187	0,163	0,141	0,123	0,107	0,093	0,081	0,070	0,061
Discounted flows		**0,0**	**0,0**	**-0,8**	**2,3**	**0,0**	**2,1**	**0,0**	**0,0**	**1,4**	**3,9**	**2,6**	**4,6**	**16,8**	**21,0**	**4,9**	**2,7**	**2,4**	**2,1**	**1,8**	**1,6**	**1,4**
NPV	**70,7**																					
Probability of success	15%																					
rNPV	**10,6**																					

Valuation summary 554-001 (EURm)

- Licensing package: Upfront + clinical milestones + commercial milestones = EUR420m
- Peak sales 2037E: EUR1.39b
- Probability of success: 15%
- Discount rate: 15%

Geographical breakdown

rNPV Europe	9,0
rNPV Northern America	20,1
rNPV Japan	2,6
rNPV China	10,6
rNPV 554-001 (EURm)	**42,3**

Sensitivity to discount rate and probability of success

		Discount				
		13%	14%	15%	16%	17%
Prob. success	10,0%	34,1	31,0	28,2	25,7	23,5
	12,5%	42,6	38,7	35,2	32,1	29,4
	15,0%	51,1	46,4	**42,3**	38,6	35,2
	17,5%	59,6	54,2	49,3	45,0	41,1
	20,0%	68,2	61,9	56,4	51,4	47,0

Conservative assumptions implemented in our model give a realistic value of EUR 42m for 554-001 in the IPF indication. This value does not take into account a likely marketing in a large number of countries (Rest of Europe, Latine America, Middle East, Asia,…).

Peer comparison and recent deals

- Listed companies:
  - Lack of pure player in the field of IPF
  - Possible comparison approach in the French universe: companies with a lead candidate in Phase I or early Phase I/IIa
    - Oncodesign Precision Medicine (ALOPM): market capitalization of EUR 18m (2 ongoing Phase I/IIa CNS, cancer)
    - Phaxiam (PHXM): market capitalization of EUR 16m (ongoing Phase I/IIa, resistant infectious diseases)
    - Valerio Therapeutics (ALVIO): market capitalization of EUR 12m (ongoing Phase I/IIa, cancer)
  - Pliant Therapeutics (US - Nasdaq PLRX): lead project Bexotegrast in Phase IIb/III in IPF (+ 1 second indication in Phase IIa and 2 other candidates in Phase I). Market Capitalization of USD 738m

- Recent deals in pulmonary therapeutic area:
  - **2020:** RXC006 from **RedX** (Pre-Clinical in IPF), licensed by **AstraZeneca** (upront USD17m, milestones up to USD360m, mid-single digit royalties)
  - **2023:** Acquisition of the **Lung Therapeutics** (several candidates of which LTI-03 in IPF) by **Aileron Therapeutics** (Market Capitalization USD 81m)
  - **2024:** C21 from **Vicore** (Phase II in IPF), Japanese commercial rights acquired by **Nippon Shinyaku** (upfront USD10m, milestones up to USD 275m, royalties not disclosed)

CONCLUSION

- The risk-adjusted Net Present Value (rNPV) approach, based on conservative assumptions in terms of price and market share, gives a project value close to **EUR 42m**.

- The peer comparison, despite its obvious limitations, shows that French listed companies with a key asset at a similar clinical stage to 555-001 (Phase I or Phase I/IIa) have market capitalizations ranging from **EUR 12m** to **EUR 18m**. Such levels of valuation do not correspond to the usual value of biotech projects. Small French listed companies face refinancing problems (significant dilution) which exerts strong pressure on share price, regardless of the quality of the drug candidates.

- A US-based company (Pliant Therapeutics) with an asset in a more advanced stage (Phase IIb/III) benefits from a clear interest from investors (market capitalization of **USD 738m**)

- Recent deals show that IPF is an attractive therapeutic area for the pharmaceutical industry (significant package of upfront/milestones payments + royalties).

In conclusion, we consider our valuation of EUR 42m to be realistic. The expected therapeutic benefits of 554-001 pave the way for significant value creation and a likely strategic alliance with a first tier pharma company.

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- **Fundamental research:** 8 years (CNRS, CEA) – Professor Assistant at Ecole Normale Supérieure de Lyon and University Claude Bernard Lyon I
- **Equity Research:** 14 years in sell-side Pharma/Biotech/Medtech financial analysis (Dexia Securities, HSBC Securities, Kepler Cheuvreux, Swiss Life). Involved in many IPOs/SPOs of Biotech/Medtech companies (Carmat, Adocia, Mauna Kea Technologies, Bone Therapeutics…)
- **Chief Financial Officer:** 5 years CFO Laboratoires Goemar (in charge of innovation strategy and licensing)
- **Asset Management:** 4 years in Asset Management focused in the biotech sector (Kalliste Biotech Fund)
- **Consulting:** Co-founder of Chairman of BioStrategic Partners (firm specialized in valuation of assets of biotech/medtech companies, independent equity research analysis)
- Co-founder of **Biomed Impact** (daily comments on news released by French Biotech/Medtech companies)

- *Graduated from Ecole Normale Supérieure de Lyon*
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