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FDA Delay Will Not Push Rocket Pharma Off Its Trajectory

by Andrew McConaghie

The gene therapy company could have two products approved by the end of 2024 – with ambitions for long-term expansion beyond rare disease.

Rare disease gene therapy company [Rocket Pharmaceuticals](#) looks set to gain its first drug approval and file another candidate this year, despite a last-minute delay from the US regulator.

While analysts judge many pre-market gene therapy companies to have risky pipelines and questionable commercial prospects, Rocket is seen as an exception, thanks to a pipeline of six promising gene therapy candidates (three AAV-based and three lentiviral-based) in clinical development.

That confidence is based on the company's focus on targeting life-threatening conditions with few existing alternative therapies, (in contrast to others targeting diseases such as hemophilia) and clear clinical benefits from early studies. (Also see "[The 'Haves And Have-Nots' Are Becoming Clearer In Cell And Gene Therapy](#)" - Scrip, 16 Jan, 2024.)

These include its lead candidate, Kresladi (marnetegrane autotemcel), its lentiviral-based gene therapy for severe leukocyte adhesion deficiency-I (LAD-I). However, the original 31 March action date from the US Food and Drug

Key Takeaways

- Rocket Pharma looks set to gain US approval for its first rare disease gene therapy Kresladi on 30 June
- While none of its current six pipeline assets are blockbusters, analysts believe its portfolio can eventually achieve multi-billion dollar sales
- Key to its strategy is targeting severe and life-shortening conditions with few

Administration for its priority review of Kresladi has been extended by three months to 30 June.

current alternatives, including genetic cardiac diseases

The delay is to allow more time to review the company's chemistry, manufacturing and controls (CMC) submission. While such setbacks can spook investors, the company indicated that it was due to overstretched FDA reviewers rather than any irregularities in its submission. Analysts were also reassured by updates from Rocket on its Q4 earnings call on 26 February, which included confirmation that no advisory committee meeting was required, raising the likelihood of a straightforward approval.

LAD-I is an ultra-rare condition, so Kresladi is not expected to be a big earner – consensus sellside analyst estimates compiled by Evaluate forecast 2028 revenues of around \$188m. Rather, its launch, which is expected by mid-2024, is seen as an opportunity for Rocket to establish its commercial operations for bigger roll-outs in the future.

Close behind in Rocket's pipeline is RP-L102, a lentivirus gene therapy program for Fanconi anemia, which Rocket plans to file in the US and EU in the first half of 2024. Approval and launch could also arrive before the end of the year, and if successful, Evaluate's consensus sellside forecast puts 2028 sales at \$412m in 2028.

Danon Disease Is Biggest Opportunity

But Rocket's potentially most valuable clinical asset is RP-A501. It targets Danon disease which causes left ventricle hypertrophy (LVH), a life-threatening thickening of the heart that affects around 15,000 to 30,000 US and EU patients. Evaluate consensus forecasts see its 2028 sales reaching \$515m.

After protracted discussions with the FDA, a pivotal Phase II trial design has been agreed. It will enroll 12 patients followed for 12 months, with expression of the missing LAMP2 protein plus reductions in LVH as its co-primary endpoints. Results expected by the end of 2025 could support an FDA accelerated approval.

Rocket's CEO Gaurav Shah claims the AAV-based platform used in RP-A501 has shown deep efficacy in reducing LVH, and could help open the door to treating other genetic heart conditions with its other gene therapy candidates.

These include RP-A601, a treatment for PKP2-arrhythmogenic cardiomyopathy, a genetic condition causes life-threatening ventricular arrhythmias, now entering a Phase I study. This disease is more common, with a potential patient population estimated at 50,000 in the US and EU.



GAURAV SHAH

Analysts at Cantor Fitzgerald believe “this program could drive a significant narrative shift for Rocket.” They added in a same-day note that the company’s portfolio could eventually yield annual sales of around \$2bn by the end of the decade.

Another key component for gene therapy companies is manufacturing capacity, and Rocket also has on-line its facility in Cranbury, NJ, which it reports is ready for commercial-grade production.