

# OpGen

## Clinical peer-review supports the HPN panel

A recent peer-review in *The Lancet Respiratory Medicine* recapped the effectiveness of the Unyvero Hospitalized Pneumonia (HPN) panel in identifying gram-negative bacteria, leading to a reduction in use and duration of inappropriate antibiotic therapy in combination with antibiotic stewardship. This large, clinical investigator-initiated, multi-center, randomized, controlled and interventional study was conducted between May 2017 to September 2019 at two tertiary care centers in Switzerland (University Hospital of Basel and Kantonsspital St. Gallen). We view this announcement as a positive differentiator for the Unyvero HPN panel, which has been marketed in Europe since 2015 and in the United States since late 2019 as a lower respiratory tract bronchoalveolar lavage (LRT BAL) panel.

Year end	Revenue (\$m)	PBT* (\$m)	EPS* (\$)	DPS (\$)	P/E (x)	Yield (%)
12/20	4.2	(24.7)	(1.57)	0.0	N/A	N/A
12/21	4.3	(35.7)	(1.17)	0.0	N/A	N/A
12/22e	5.0	(22.8)	(0.49)	0.0	N/A	N/A
12/23e	8.1	(19.0)	(0.41)	0.0	N/A	N/A

Note: \*PBT and EPS are normalised, excluding amortisation of acquired intangibles, exceptional items and share-based payments.

The recently published peer-review in *The Lancet Respiratory Medicine* recapped the findings of an [investigator-initiated, multi-center, randomized, controlled, interventional clinical trial](#) conducted at two centers in Switzerland between May 2017 and September 2019. The clinical study assessed the impact of Unyvero HPN panel (in combination with antibiotic stewardship) in hospitalized adult patients with pneumonia at risk of infection with gram-negative bacteria. Within the scope of the study, 740 pneumonia patients were screened and out of 208 eligible patients, 100 were allocated to the intervention group, where bronchoalveolar lavage (BAL) samples were analyzed using conventional culture and Unyvero HPN panel was used for identifying gram-negative bacteria. The remaining 108 patient samples were analyzed using only traditional microbiology culture (control group).

The study concluded that Unyvero HPN panel with antibiotic stewardship is more effective and results in reducing time on inappropriate antibiotic therapy in patients admitted to hospital with pneumonia and at risk of gram-negative infection. More specifically, the use of Unyvero HPN panel reduced the use of inappropriate antibiotic therapy by 45%, decreased inappropriate therapy time to 47 hours (versus 86 hours in control group) and resulted in a 22.5% shorter overall antibiotic therapy duration for the group using Unyvero panel. The Unyvero panel detected gram-negative bacteria more frequently (39 patients) than traditional microbiology culture (30 patients).

The HPN panel has already been marketed in Europe and United States (as LRT BAL panel) since 2015 and late 2019, respectively, and we see the current publication as supporting the efficacy of the company's HPN/LRT BAL panels. The study reiterates the importance of quick and timely molecular diagnostics in antibiotic therapy and the underlying contribution of Unyvero systems in this area; this is in line with OpGen's strategy of rapid and effective diagnosis of infection.

Research update

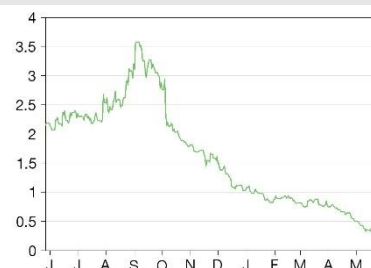
Pharma and biotech

27 May 2022

**Price** **US\$0.48**  
**Market cap** **US\$22m**

Net cash (\$m) at 31 March 2022	8.3
Shares in issue	46.6m
Free float	92.5%
Code	OPGN
Primary exchange	NASDAQ
Secondary exchange	N/A

### Share price performance



### Business description

OpGen is primarily a lab diagnostic manufacturer focused on the identification and treatment of bacterial infections. With the business combination with Curetis in H120, management has the technology necessary to detect pathogens and predict resistance. Through the dual platform offering of AMR Gene Panel and Unyvero, the company has the ability to provide diagnostic results in hours instead of days under legacy technologies.

### Analysts

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