

Expansion through partnerships

MyFiziq (ASX: MYQ) is building around a patented mobile application that allows users to track body shapes and dimensions while performing everyday activities. MyFiziq is currently focussing on four verticals (health & fitness, medical & insurance, corporate wellness, and apparel) and is largely relying on the partnership route to build its client base. The company has signed over 10 partnership agreements with well-established players since 2017, with 4 of the agreements (WellKom, TicTrac, Boditrax and WeSure) being inked in the past 6-7 months. The success enjoyed by the company in entering into partnerships is a testimonial to its strong technology commercialisation skills.

Investment case

MyFiziq's growth potential is very high due to growing adoption of smartphone apps and mHealth. Apps that allow tracking of body shapes and dimensions are clearly in demand and MyFiziq lacks any visible competition. We believe that MyFiziq's strategy to grow through partnerships is a highly scalable way to realise its potential. This saves vast amounts of capital and allows immediate access to very large pre-existing user environments.

Valuation range of A\$0.85–1.03 per share

In May 2019, we valued MyFiziq at A\$0.91 base case and A\$1.08 optimistic case based on a DCF calculation. On the back of the slow take off of existing B2B contracts we have revised our valuation to the range of A\$0.85 base case and A\$1.03 optimistic case. While MyFiziq has signed three new client agreements since May 2019, our valuation factors in the potential from only the Boditrax agreement due to lack of pricing information on the other two agreements.

Year to June (AUD)	2017A	2018A	2019A	2020f	2021f
Sales (m)	0.1	2.1	0.9	27.7	60.7
EBITDA (m)	-2.8	-14.2	-4.6	8.3	18.2
Net Profit (m)	-2.2	-13.9	-4.4	6.0	13.0
Adj. EBITDA Margin (%)	na	na	na	30%	30%
RoA (%)	nm	nm	nm	88.6%	73.1%
EPS before extr. & amort.	-2.8	-17.6	-5.2	6.2	12.8
EV/Sales	28.3	14.4	32.2	1.0	0.3
EV/EBITDA	-1.4	-2.1	-6.4	3.2	0.9
P/E	-2.3	-2.1	-5.9	4.9	2.3

Source: Company, Pitt Street Research

Share Price: A\$0.30

ASX: MYQ

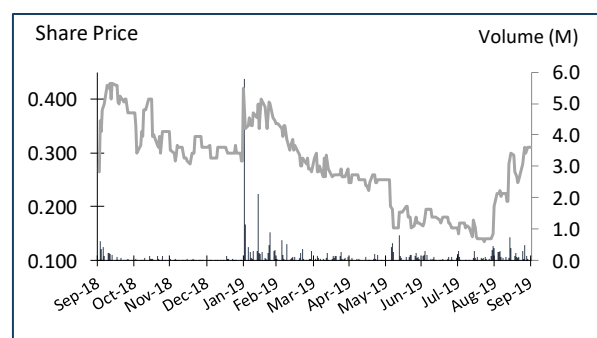
Sector: Information Technology

2 October 2019

Market Cap. (A\$ m)	30.3
# shares outstanding (m)	101.0
# share fully diluted	154.0
Market Cap Ful. Dil. (A\$ m)	46.2
Free Float	100%
12-month high/low	0.43 / 0.135
Average daily volume ('000)	177
Website	myfiziq.com

Source: Company, Pitt Street Research

Share price (A\$) and avg. daily volume (k, r.h.s.)



Source: Thomson Reuters, Pitt Street Research

Valuation metrics	
DCF fair valuation range (A\$)	0.85–1.03
WACC	12.2%
Assumed terminal growth rate	0.5%

Source: Pitt Street Research

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MyFiziq continues on the collaboration path to expand its footprint

The company has continued to build on the momentum of partnerships that started in 2017. Previously, MyFiziq had signed four agreements for partnerships in the health & fitness vertical (Fitocracy, FitLab, McGregor and Evolt360) and two agreements for partnership in the corporate wellness vertical (Prudential Singapore and Toll Logistics). In the past 6-7 months, MyFiziq has continued to grow on this path by partnering with several companies such as WellKom, TicTrac, Boditrax and WeSure. In our view, the ability of MyFiziq to on-board three new clients in the past 6-7 months, is a testimonial of its strong technology and commercialisation process.

Wellkom collaboration to provide entry in the European corporate wellness market

In September 2019, MyFiziq signed a binding term sheet with WellKom, a UK-based corporate wellness company, to expand its digital tracking capabilities and secure a foothold in the European market. Notably, Wellkom's corporate wellness platform is deployed across ~100 organisations and 12 languages.

Under the terms of the agreement, MyFiziq's technology will be integrated into the WellKom platform. MyFiziq will support WellKom with measurement output, mapped across behavioural change outputs. The integrated solution is expected to benefit both individuals and employers by reducing the potential risk of common long-term conditions and consequently, increasing workforce productivity with low costs of absence and insurance claims. Meanwhile, WellKom – via its validated psychometric wellness software – will support MyFiziq in profiling and reporting individuals, enabling root cause analysis at an individual and organizational level. The integrated solution will be launched to employers across Europe, including the UK. WellKom will provide the solution to its clients, which include corporate wellness, insurance and human resource organisations.

MyFiziq to enter the European market through its collaboration with WellKom and TicTrac

TicTrac collaboration to solidify position in the global wellness market

In September 2019, MyFiziq signed a non-binding term sheet with TicTrac – a UK-based digital health engagement company. TicTrac is a well-established player in the wellness market and is connected to ~1,000 apps and device platforms globally. The company's platform gathers contextual information regarding an individual's lifestyle by combining signals from their smartphones, apps and wearables. The company's clientele includes insurance companies, employers and governments.

As per the terms of the agreement, MyFiziq will embed its technology across the TicTrac solution portfolio. The integrated solution will be made available to all of TicTrac's clients and is expected to be launched by November 2019.



MyFiziq partners with Boditrax to drive its presence in health & fitness market

Boditrax UK collaboration will provide access to the integrated health application market

In June 2019, MyFiziq signed a binding term sheet with Boditrax Technologies (Boditrax), a UK-based digital solutions company to integrate its technology within the Boditrax platform. The upgraded platform will enable consumers to gain access to MyFiziq's technology in addition to the on-site Boditrax scan service. Under the terms of the agreement, Boditrax will initially pay MyFiziq US\$2.5 per user per month based on an annual subscription. The product is expected to be launched by Q4 2019. The initial launch campaign will be shared with ~6,000,000 current Boditrax subscribers. The companies intend to reach an initial target of 600,000 downloads within the first year of launch.

The partnership opens the door for MyFiziq to leverage Boditrax's diverse and reputed clientele that includes National Health Service (NHS), HM Government, BBC, Sky, Rolls-Royce, Renault, Cadbury and Kellogg's among others. MyFiziq is likely to derive further benefits from this collaboration, as Boditrax has aggressive expansion plans with an aim to achieve ~10 million active user-count in the next one year. Further progress reported in the Body Composition Technology and WeSure collaborations

MyFiziq reports significant progress in its product development collaboration with WeSure

In March 2019, MyFiziq and Body Composition Technology (BCT), entered into a binding agreement with China-based WeSure (a Tencent insurance platform). Under the agreement, both companies agreed to assess and develop user engagement protocols. This will allow subscribers of WeSure and WeFit applications to access MyFiziq's technology related to insurance, wellness and fitness activities. The collaboration is expected to have three phases – testing, validation and commercialisation in China.

Progress in the WeChat collaboration

In July 2019, MyFiziq announced that its digital team has been working through the complex WeChat allowable protocols and application size to integrate its technology into the WeChat mini application infrastructure. The key challenge faced by the team is that MyFiziq's current capturing process requires a minimum application size of 40meg, and the team is focussing on reducing the application size by developing methods to embed the entire process inside a mobile device.

Patent approvals across China and Canada

MyFiziq plans to gain patent protection across the globe to strengthen its market position

In June 2019, the company received the Patent No CN106999107B from the China Patent and Intellectual Property Office and in August 2019, it announced that Patent 2,969,762 was issued by the Canadian Patent and Intellectual Property Office. The company has accelerated its global patent applications in order to commercialise its technology globally. MyFiziq plans to launch multiple patent applications across global market.

Further validation on accuracy of MyFiziq's smartphone technology

MyFiziq's technology uses images captured using a smartphone to create an individual's representation in the form of a 3D format with accurate circumference measurements. It was previously validated by Professor Tim Ackland from the University of Western Australia in October 2018. The average accuracy of the MyFiziq technology was reported as 97.5% across the four circumference measures – chest, waist, hips and thighs.

BCT's study indicates that MyFiziq's technology is at par with 3D laser anthropometry

In July 2019, MyFiziq engaged BCT, a Singapore-headquartered technology company, to further validate its smartphone technology. The study was conducted by Dr. Jonathan Staynor, a research associate at BCT. The Kuehnafel Study¹ conducted in 2016 that assessed the reliability of 3D laser-based anthropometry was used as the reference standard for the current study. The Kuehnafel Study compared anthropometric measurements taken by trained physicians, ANTHROSCAN VITUS XXL 3D scanner and Scan WorX Anthroscan Professional software.

To replicate the Kuehnafel Study, Dr. Staynor collected physician measured anthropometry data, front and side images of 1,500 male and female participants (aged 18–65 years). He then used the neural network in MyFiziq's application to predict body weight, chest, waist, hip and thigh circumferences of 183 randomly selected participants (108 males and 75 females). These participants were not included in the development of the model. These predicted measures were compared to the physician measured circumferences using the same concordance correlation coefficient (CCC) analysis as the one used in the Kuehnafel Study. The results (shown below) demonstrated excellent correlation (CCC value >0.90) with the 3D laser scanner and the physician measured circumferences in most cases, with the exception of thigh circumference where the MyFiziq technology was far more accurate.

Measurement	VITUS 3D Scanner CCC	MyFiziq CCC
Weight	1.00	0.98
Waist	0.98	0.97
Hip	0.97	0.95
Thigh	0.56	0.94

¹ Kuehnafel et. al. (2016). *Reliability of 3D laser-based anthropometry and comparison with classical anthropometry*. *Scientific reports*, 6, 26672.



Revised valuation – A\$0.85/A\$1.03 per share

We described our approach for valuing MyFiziq using DCF in our May 2019 initiation report. With this update, we retain the basic assumptions of that time, however we now factor in the following:

- There will be a time lag in realising the top-line growth from the contracts signed by MyFiziq in FY2019, which we expect to fully materialise during 2020-23, as the company leverages the brand value and market share that these partners enjoy in their respective verticals.
- The growth trajectory for the number of subscribers relating to the Boditrax deal signed in June 2019 will be similar to those of the previous contracts.
- We have not included the potential revenues from WellKom and TicTrac agreements due to lack of deal pricing information.

The above aspects have had the effect of lowering our valuation range from A\$0.91 base case/A\$1.08 optimistic case (May 2019) to A\$0.85 base case/A\$1.03 optimistic case (Figure 1). MyFiziq has not played a role in the parameters. Pitt Street have used nor has it supplied any financial information used to conclude the valuation.

Figure 1: Our new valuation of MyFiziq

Valuation (A\$m unless specified otherwise)		
	Base Case	Bull Case
Present value of FCF	68.2	74.9
Present value of Terminal FCF	52.7	71.2
Enterprise Value	120.9	146.0
Net debt (cash)	0.9	0.9
Minority interest	-	-
Equity value	120.0	145.1
FY 2019 Diluted Shares (m)	140.5	140.5
Implied price (AUD cents)	85.4	103.3
Current price (AUD cents)	28.0	28.0
Upside (%)	205%	269%

Source: Pitt Street Research



Figure 2: Sensitivity of our model to WACC and Terminal Growth Rate

Sensitivity Analysis									
WACC	12.2%								
Terminal Growth Rate	0.50%	Change in WACC							
Implied Price (AUD cents)	85.4	11.5%	11.7%	12.0%	12.2%	12.5%	12.7%	13.0%	13.2%
Change in Terminal Growth Rate	-0.25%	89.5	87.2	85.0	82.9	80.9	79.0	77.1	75.4
	0.00%	90.4	88.1	85.8	83.7	81.7	79.7	77.8	76.0
	0.25%	91.4	89.0	86.7	84.5	82.4	80.4	78.5	76.7
	0.50%	92.5	90.0	87.7	85.4	83.3	81.2	79.2	77.4
	0.75%	93.6	91.1	88.6	86.3	84.1	82.0	80.0	78.1
	1.00%	94.7	92.1	89.7	87.3	85.0	82.9	80.8	78.8
	1.25%	96.0	93.3	90.7	88.3	86.0	83.7	81.6	79.6

Source: Pitt Street Research

Re-rating MyFiziq

We believe that as the previously signed collaboration deals with Fitocracy, Mayweather Boxing, Conor McGregor, EVOLT and Prudential Singapore, take off, MyFiziq will witness substantial uptick in subscription revenue. Additionally, the company's ability to on-board three new partners since our initiating report in May 2019 signifies an efficient commercialisation process. In our view, these factors should help the company realise its revenue potential and re-rate the stock to our valuation range.

Risks

We see four major risks for MyFiziq as a company and as a listed stock:

- **Licensing risk.** MyFiziq is focussed on taking its body-shape-tracking technology to different customer verticals through licensing and subscription. This entails the risk of its technology failing to gain much interest in this segment from potential partners.
- **Funding risk.** More capital may be needed to grow the potential of the company's technology.
- **Collaboration risk.** MyFiziq could fail to secure sufficient partners for increasing the adoption of its technology in different business segments.
- **Timing risk.** There is a possibility that the commercialisation of an integrated technology-based partner product may take longer than expected.

Background to MyFiziq Limited

Introducing MyFiziq Limited (ASX: MYQ)

MyFiziq, a South Perth-based technology and services company, has developed a body-shape-tracking technology that is embedded in a partner's app/users mobile phone to enable them to track body shape, total body fat and dimensional changes while they perform routine activities or supply this data to their insurers or help them make more informed choices when buying apparel on line. The technology uses images captured using a smartphone to create an individual's representation in the form of a 3D avatar with accurate circumference measurements.

MyFiziq has developed a body-shape-tracking technology for a number of customer verticals, including health & fitness

MyFiziq offers a suite of Software Development Kits (SDKs) and white-label apps to B2B partners in various industry verticals, including health & fitness, medical & insurance, corporate wellness and apparel. Partners either embed the company's SDKs into new or existing apps or utilise one of MyFiziq's white-label offerings to customise the experience to suit their branding requirements. The combined offering is then made available to the partners' end-users for a per-avatar, per-user, per-month subscription fee, or a percentage of the gross sale price, depending on the vertical and unique partner requirements.

What is MyFiziq's business model?

MyFiziq primarily operates through a B2B2C model by collaborating with businesses that require tracking of body dimensions, shape or total body fat levels of customers. It generally earns revenue in the form of development and licencing fee and subscription fee² paid by its partners. Partner companies can embed MyFiziq technology in various ways such that it complements their existing environment. The entire range of services offered by the company includes the following (Figure 3):

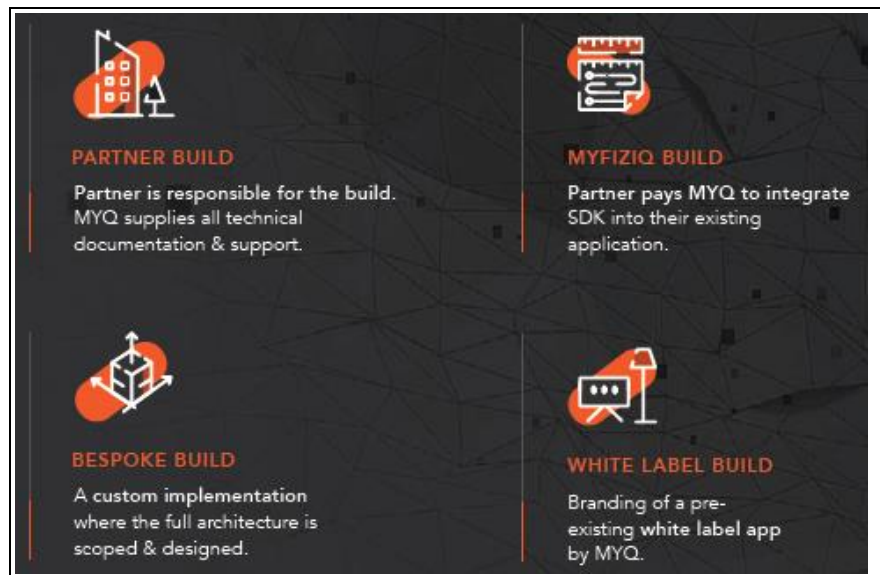
- **Partner Build:** MyFiziq provides the required SDK components, documentation and support to the partner; however, the partner is responsible for the development of the app and implementation of the MyFiziq SDKs.
- **Bespoke Build:** Both the partner and the company perform customised development. Both partner and MyFiziq design and scope the full architecture of the app.
- **MyFiziq Build:** The partner pays MyFiziq to develop and design the application³ in order to integrate MyFiziq SDKs into its existing app.
- **White-label Build:** MyFiziq performs re-branding of the pre-existing white-label app.

² Partners are charged based on the number of end-users/customers utilising their technology.

³ Varies based on the number of users or type of vertical.



Figure 3: MyFiziq services



Source: Company

MyFiziq offers different pricing structures based on the type of customer vertical.

- For the health & fitness vertical, the company charges a base cost of US\$4.99 per user, per month on a 12-month subscription to provide partner app users with the ability to measure and track dimension changes as a direct result of the nutrition, training, and coaching partners provide. The pricing is based on a volume user model where the pricing is reduced on a per month basis when certain pre agreed volume levels are met.
- For the medical & insurance vertical, the company charges a base cost of US\$4.99 per policy, per month. It allows insurers to capture more accurate body composition than BMI. In addition, the technology has been proven to identify the markets for chronic lifestyle diseases assisting in the early detection and intervention required for better health outcomes and it measure body fat (as an indicator of health status) of policyholders. The pricing model is volume-dependent as provided for health & fitness vertical.
- For the corporate wellness vertical, the company charges a base cost of US\$4.99 per employee per month. It provides employees interventions and reward-based activity in the workplace while increasing productivity. The pricing model is volume-dependent as provided for health & fitness and medical & insurance verticals.
- For the apparel vertical, the company charges 5% of the gross sale price per garment and a licence fee for the SDKs. The company follows a tier-based pricing model, where the company charges 5% of the gross sales for the first 5 million units, 4% per sale up to the next 5 million units and 3% per sale on sales above 10 million units.

MyFiziq's pricing structures varies by vertical targeted

MyFiziq offers multiple competitive advantages over traditionally used products

MyFiziq offers many benefits to the end-user over other available traditional products (Figure 4).

- **Accuracy:** In a validation study conducted by Professor Timothy Ackland, Professor of Applied Anatomy and Biomechanics at the University of Western Australia, among ~800 participants, MyFiziq demonstrated 97.5% average accuracy across four circumference measurements – chest, waist, hips and thigh⁴. These results were further validated by a recent study undertaken by BCT's Dr. Jonathan Staynor in July 2019.
- **Short end-to-end processing time:** With the embedment of in-device processing capabilities (in January 2019), the end-to-end image processing time through the app has reduced massively (~15 seconds from 60 seconds per attempt in the older version)⁵.
- **Automatic historical tracking:** The app retains a copy of personal Avatars that are generated for a particular user. This helps users track fitness level and body changes over a period.
- **Cheaper:** The app charges a nominal monthly subscription fee for its technology-based offerings – as opposed to the more expensive medical body scanners, home scanning equipment or scanning booths. Moreover the technology can be used by a consumer on their mobile device by simply downloading the application via one of the companies providers.
- **Mobility and convenience:** The app can be imbedded on the user's mobile device and operated from home. The user does not need to visit any lab/hospital for body measurements. Therefore, offering far greater privacy, convenience and substantially lower cost.

MyFiziq demonstrated an accuracy of 97.5% across four circumference measurements – chest, waist, hips and thigh

Figure 4: MyFiziq vs. other available products

	MY FIZIQ	Traditional scales	Standard tape measure	Medical body scanner	Home scanning equipment	Scanning booths	Other apps & online programs
Mobile Capability	✓	Not practical	✓	✗	✗	✗	✓
Accurate circumference measurements	✓	✗	User dependent	✗	✓	✓	Depends
User can interact with avatar	✓	✗	✗	✗	✓	✗	✓
Rapid feedback (< 5 minutes)	✓	✓	✓	✗	✓	✓	✓
Automatic historical tracking	✓	✗	✗	✗	✓	✓	✓
Predictive modelling	✓	✗	✗	✗	✓	✗	✗
Low cost (< \$1)	✓	Depends	✓	✗	✗	✗	Depends

Source: Company, Pitt Street Research

⁴ See MyFiziq ASX announcement dated 18 October 2018 and headlined 'Accuracy validation study of MyFiziq leading technology'.

⁵ See MyFiziq ASX announcement dated 24 January 2019 and headlined 'MyFiziq To Release In-Device Processing'.



Ten reasons to consider MyFiziq

- 1) **MyFiziq technology has a 'blue sky' of applications.** MyFiziq is initially focussing on four key industries that require anthropometric tools, including health & fitness apps, medical & insurance, corporate wellness and apparel. All these industries are touted to have immense future growth potential. Moreover, the technology's use can be expanded to many other industries that require tracking of fitness/body shape.
- 2) **Conventional ways of taking body measurements are outdated and need serious replacement options.** MyFiziq technology is easy to use, accurate, and more convenient than traditional measurement methods such as scales, tapes and body scanners.
- 3) **The accuracy results are extremely promising.** The company, along with researchers from the University of Western Australia, have shown that the technology, in pre-production formats can measure dimensions of the human body with an average accuracy of 97.5% and body fat with an accuracy of 89%. The high accuracy levels were further validated by tests conducted by Dr. Jonathan Staynor of BCT in July 2019.
- 4) **The number of smartphone and wearable device users is expected to continue to rise.** By the end of 2018, two-thirds of adults across the globe are expected to own smartphones and are likely to account for 73% of internet consumption. This trend is expected to have a strong impact on the adoption of MyFiziq's technology.
- 5) **There is significant demand for mobile health apps.** Currently, there is a high demand for mobile health apps owing to the benefits it provides to both healthcare providers as well as patients. According to a 2018 survey by Accenture, nearly half (48%) of healthcare consumers are using mHealth apps now, compared to just 16% in 2014. This bodes well for apps that track overall fitness and health of a consumer. Moreover, in a world of immediate access and convenience, where users want their results 'here and now', the availability of MyFiziq's technology in a mobile phone puts it in a favourable position.
- 6) **MyFiziq has potential for rapid uptake in the health & fitness segment.** It has already signed binding term sheets with fitness app developers, renowned trainers and fitness device companies to capture their user base. With the commercialisation of integrated apps, we believe MyFiziq has a significant near-term growth opportunity.
- 7) **The technology has the potential to replace BMI scale traditionally used by insurers to measure policyholders' health.** A study conducted by researchers from UCLA and UC Santa Barbara found that the BMI scale is not reliable for classifying someone's health status. MyFiziq app's ability to identify the relation between body fat and chronic disease makes it an ideal tool to track policyholders' health. Therefore, it has a potential to replace the BMI scale in future.
- 8) **Corporates in industries that are at higher risk of human capital are likely to adopt MyFiziq technology.** These industries include aviation, insurance, logistics and transport. They are likely to adopt wellness platforms, along with the MyFiziq technology, to mitigate this risk by providing a platform that will allow employees to work on improving health, engagement and productivity at their workplaces. Furthermore, by overlaying data sets such as incident and fatigue data, in conjunction with wearable information such as heart rate and sleep, MyFiziq data can be used to aid in preventing incidents by identifying at risk individuals.



- 9) **There is a significant opportunity for the use of technology in the apparel industry.** Garment returns due to incorrect size are increasing the cost burden on retailers. Additionally, much of incorrect size returns are sent to landfill. Therefore, in order to cut down return costs, and reduce environmental impacts of wrong size returns, companies are actively looking for technologies that allow their consumers to purchase clothes based on their body dimensions. We believe that MyFiziq technology can fulfil this need.
- 10) **We believe MyFiziq is currently undervalued.** We value the company using DCF approach between A\$0.85-1.03 per share based on base case and optimistic case assumptions, respectively. We have followed a conservative approach in estimating the long-term revenue growth potential of the company across its four target verticals.

Analyst qualifications

Stuart Roberts, lead analyst on this report, has been covering the Life Sciences sector as an analyst since 2002.

- Stuart obtained a Master of Applied Finance and Investment from the Securities Institute of Australia in 2002. Previously, from the Securities Institute of Australia, he obtained a Certificate of Financial Markets (1994) and a Graduate Diploma in Finance and Investment (1999).
- Stuart joined Southern Cross Equities as an equities analyst in April 2001. From February 2002 to July 2013, his research specialty at Southern Cross Equities and its acquirer, Bell Potter Securities, was Healthcare and Biotechnology. During this time, he covered a variety of established healthcare companies such as CSL, Cochlear and Resmed, as well as numerous emerging companies. Stuart was a Healthcare and Biotechnology analyst at Baillieu Holst from October 2013 to January 2015.
- After 15 months in 2015 and 2016 doing Investor Relations for two ASX-listed cancer drug developers, Stuart founded NDF Research in May 2016 to provide issuer-sponsored equity research on ASX-listed Life Science companies
- In July 2016, with Marc Kennis, Stuart co-founded Pitt Street Research Pty Ltd, which provides issuer-sponsored research on ASX-listed companies across the entire market, including Life Science companies.

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