ALIGN
RESEARCH

Tekcapital

6th March 2018

Intellectual property investor with a unique business model, creating value from university IP

SPECULATIVE BUY

AIM listed Tekcapital is an international provider of technology and intellectual property investment services. The company's objective is to create value from investing in new, university-developed intellectual properties and to produce returns through capital appreciation.

Unique business model within the IP industry

Tekcapital's approach to investing in IP is different to its competitors. Instead of being aligned to just one or a few universities it has access, via a proprietary discovery search engine, to 4,500+ universities in 160 countries around the world. This is supported by a network of over 60 scientific advisors who review and select the IP with the most commercial potential.

Nine portfolio companies each with significant commercial potential

The current IP investment portfolio consists of nine companies operating across a range of industries. Tekcapital is now in the process of creating value from these investments, with the monetisation strategies including prototype development, out-licensing of IP to third-parties, trade sales or IPO.

Complementary services business provides revenue stream and access to further IP investment opportunities

The core IP investment business is supported by an IP services offering which provides universities and companies with invention discovery reports, search tools, analytics and IP professional recruitment to help them create value from new discoveries. **Revenue from services grew at a CAGR of 179% from 2013 to 2016.**

Shares trade at a modest discount to the average sector price-to-book value ratio, with significant long-term upside potential on offer

The current valuation of Tekcapital represents a discount to the average price-to-book value ratio of the wider UK IP sector and we also see significant longer term opportunities here for investors. We initiate coverage with a **Speculative Buy** stance.

Table: Financial overview. Source: Company & Align Research

Year to end Nov	2013A	2014A	2015A	2016A	H12017A
Revenues ($m)	0.04	0.21	0.41	0.76	3.81
Pre-tax ($m)	(0.04)	(0.99)	(1.46)	(2.56)	1.55
EPS (c)	(0.3)	(5.0)	(4.9)	(6.3)	4.4

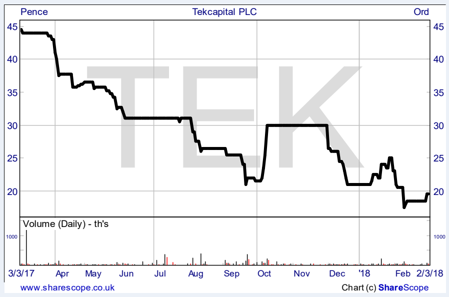
This investment may not be suitable for your personal circumstances. If you are in any doubt as to its suitability you should seek professional advice. This note does not constitute advice and your capital is at risk. This is a marketing communication and cannot be considered independent research.

TEKCAPITAL®

Key data

EPIC	TEK
Share price	19.5p
52 week high/low	44p/17.5p
Listing	AIM
Shares in issue	42,654,707
Market Cap	£8.32m
Sector	Intellectual Property

12 month share price chart



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Corporate Background

Tekcapital Plc was founded in 2014 by current Chairman Dr. Clifford Gross and several fellow graduates of Oxford University's Said Business School. The Plc then listed on AIM in April 2014 with the main focus of commercialising university discoveries through the delivery of IP services, providing clients with a complete solution to locate, screen and acquire technologies available for acquisition or license from some of the world's leading universities and research institutions. **The company operates in a large and growing market, with the World Bank estimating that global trade in IP licences was worth more than £220 billion in 2014.**

Driving the company's **IP services** is its proprietary Innovation Discovery Network (IDN), a platform capable of searching through a large global database of universities and research institutions to identify IP acquisition opportunities relevant to clients' search parameters. The company also helps universities to sell their IP by bringing them together with corporate clients. **As of today, the database is linked to over 4,500 universities in 160 countries, providing access to a vast range of uncommercialised technologies - it is estimated that academic institutions add around 100,000 IP discoveries per annum but that c.80% of these never leave the institutions.** The large database increases the probability of Tekcapital finding appropriate IP for its clients, which have included many well known blue-chip companies such as IBM, Ford Kraft, along with a number of leading universities.

Global universities accessible on the Innovation Discovery Network. Source: Company

In order to reduce the risk of adverse selection for its clients Tekcapital also works with a network of more than 60 scientific advisors, who are specialists in a range of disciplines, that use their expertise to evaluate and select IP most relevant to clients' needs and provide them with a competitive advantage. Once a suitable technology acquisition opportunity is identified and presented to the client the company helps to evaluate the IP and, if suitable, acts as an intermediary between the client and IP owner with a view to the acquisition or licensing of the specific technology. Fees are earned in the services business via retainers or fee for service arrangements.

The services business was further expanded in July 2014 by the acquisition (for 879,770 new Tekcapital shares) of **InventionEvaluator.com**, a service which offers clients in-depth analytical reports that assess the commercial potential of new technologies and IP and enable companies and universities to make more informed decisions regarding potential investments.

Then, in April 2016, Tekcapital further expanded its service offering by acquiring certain assets and the business of **Vortechs Group**, a technology transfer executive search firm. Founded in 1998, Vortechs specialises in executive search for organisations seeking technology transfer professionals. The business was acquired for 577,868 new Tekcapital shares and $100,000 in cash.

Further complimenting the service offering, in May 2017 the company launched a new mobile device application that facilitates the searching of intellectual properties from universities worldwide. The **Tekcapital App** provides access to information on international university patents across a range of disciplines, automatically indexes a user's progress and can export patent data via email for easy sharing. The app is also linked to the Invention Evaluator service, enabling the user to assess, for an additional fee, the commercial potential of any patent.

In 2015, Tekcapital expanded its focus by making the decision to use its skills in identifying and screening promising new IP to make acquisitions for its own portfolio.

This saw the company begin to acquire exclusive licences to potentially disruptive technologies for subsequent development, commercialisation and out-licensing to corporations. **While the company continues to advance the intellectual property services business, the main focus now is upon creating value from investing in new university developed IP and producing returns through capital appreciation.**

The first technology acquisition was made in January 2015 and as of 31st July 2017, the release day of the most recent interim results, the company had secured exclusive licences to 59 patents, applications and industrial designs. Typically, acquisitions are structured to involve a small upfront payment (either in new Tekcapital equity or cash) for an exclusive licence to the IP along with a royalty or revenue share. This helps to keep costs low, reduce the financial cost of any one particular technology failing to be commercialised and increases the upside from those that are. **Tekcapital has stringent requirements for the technologies it acquires, including the IP being socially responsible, significantly disruptive in its field, having the potential to address a growing, global market and having the ability to improve quality of life. In addition, the technology needs to be sufficiently well developed to enable Tekcapital to add value and de-risk the opportunity in a short period of time with modest investment.**

The current investment portfolio as detailed in this note now consists of nine companies across a range of industries, each at various stages of commercialisation. Tekcapital is currently in the process of creating value from these investments with monetisation strategies including building prototypes, out-licensing to third-parties, trade sales or IPOs. **This value-add approach helps to shorten the time horizon from acquisition to revenue generation/value creation, especially when compared to traditional venture capital companies which, according to the National Venture Capital Association, have an average holding period of eight years. Recently, both Belluscura plc and Lucyd Pte Ltd have demonstrated the effectiveness of this near term value enhancement approach.**

Portfolio Companies

Belluscura

The most commercially advanced business within Tekcapital's portfolio is 39% owned medical device company Belluscura which was set up by Tekcapital in December 2015 and began to be staffed in mid-2016. Since then the business has built up a portfolio of premium medical devices by acquiring non-core assets from medical device companies and research institutions, which has included NYSE listed medical technology company **Stryker Corporation (SYK)** as well as other organisations. It then sells these products at value prices to address part of the global unmet need for affordable, premium quality medical devices.

When looking for products to acquire, Belluscura's strategy is to buy premium products with an existing or recent sales history which have either achieved regulatory clearance or require limited additional regulatory clearance. Technologies that are close to or at prototype stage and require limited time and investment to reach commercialisation are also considered. The focus is on lean outsourced manufacturing and diverse flexible distribution channels to provide a competitive advantage and to keep the prices affordable for the end-user.

Current portfolio

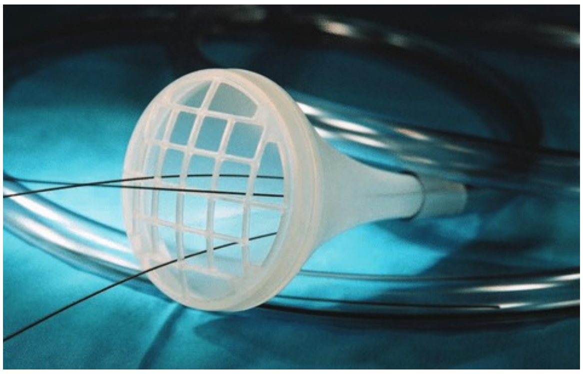
Belluscura has acquired licences to manufacture and sell four medical device product lines from Stryker. These are:

Passport® - launched in the US in March 2017, Passport is a disposable trocar - a sharp pointed surgical instrument enclosed in a tube (cannula) containing a seal. It is used in laparoscopic, or 'keyhole' surgery, and features the patented SmartTip™ technology, designed to be compatible with the Da Vinci® S and Si robotic surgical systems. Passport is used as the access point for an endoscope camera which allows surgeons to visualise the procedure site. The SmartTip controls the cutting blade to prevent accidental deployment inside the patient and potential tissue damage.

Passport is the first of a family of trocars and cannulae that Belluscura is looking to launch over the coming years with the company seeking to take advantage of a move towards laparoscopic procedures from invasive surgery due to faster recovery times, lower surgical headcount requirements and better training. Passport also has a CE Marking for distribution in the EU.

Slyde™ - A compact, wall mountable, patient evacuation sled for moving immobile patients by carrying or pulling up and down stairs or other uneven terrain in the case of fire, natural disasters, attacks or other emergencies. Slyde folds up and stores in stacks of up to five units in a storage sleeve and is sold in two sizes with a range of accessories. Adding to its existing market in the US, Slyde was launched in the EU in March 2017.

Wire Caddy™ - a wire management system that provides lubrication and organisation during multi-wire, multi-exchange operating room cases. Its unobtrusive positioning allows quick access to lubricated guidewires during surgical procedures in interventional radiology, catheterisation laboratory, vascular suite and other operating room operations. The product was relaunched in the US in February 2017 having previously achieved commercial sales in over 100 hospitals.



SNAP II/III™ - a level of consciousness monitor for use during surgical procedures requiring general anesthesia. Management believes that SNAP II will require certain design updates in order to fulfill its potential within the anesthesia market, so is now developing SNAP III. It is believed that the core technology also has significant potential for retail applications in markets outside anaesthesia, particularly in the field of sleep measurement and evaluating and identifying sleep disorders.

Belluscura is contract manufacturing the Passport®, Slyde™ and Wire Caddy™ and also intends to contract manufacture the SNAP III™, replacing the existing manufacturer. By investing in technological development and new manufacturing techniques the company believes that the cost and therefore price of these products can be reduced while maintaining their quality and premium status.

Other agreements

In February 2017 Belluscura entered into a co-exclusive license and development agreement with Separation Design Group to develop CURV™, a next generation portable oxygen concentrator (POC), a device used to deliver concentrated oxygen to a patient requiring oxygen therapy. POCs are typically prescribed to people suffering from chronic obstructive pulmonary disease (COPD), a condition which the World Health Organization estimates 64 million people are suffering from around the world in moderate to severe form. **According to analysts at Winter Green Research the portable oxygen concentrator market is expected to nearly double to $2.2 billion by 2021.** As part of the agreement, Belluscura has licensed a portfolio of six intellectual properties from SDG and has agreed to provide monthly funding towards the development of a prototype POC device.

Acquisition broadens IP

In April 2017 Belluscura acquired **Nanotether Discovery Science Ltd** for c.£265,000 in new ordinary Belluscura shares. Founded in 2012, Nanotether owns intellectual property designed to accelerate the rate at which biomolecular interactions can be studied via biological assays, intended for use in the pharmaceutical and biotechnology markets, especially where high throughput drug discovery programmes are in use. Belluscura acquired all the intellectual property, cash reserves and tangible assets of Nanotether. No employees or consultants remained with Nanotether and liabilities regarding previous and current employees were settled prior to the acquisition.

Nanotether's unaudited management accounts as at 5th April 2017 showed net assets of c.£281,000, which included c.£204,000 of cash and negligible liabilities. Intellectual property was valued at nil. The unaudited accounts show an operating loss of £5,000 for the period from 1st August 2016 to 5th April 2017, reflecting a minimal level of operating activity after the company was wound down from the fourth quarter of 2015 to a "care and maintenance" basis. Nanotether's most recent accounts, for the financial year ended 31st July 2016, showed an operating loss of c.£255,000 and no revenue.

Funding

Belluscura has primarily been funded via several private placings to date, including a $1.5 million raise in June 2016, a $675,000 raise in October 2016 and a c.$1.7 million in May 2017. The funds have been used for the acquisition of products; regulatory, safety and quality expenses for medical products, including CE Marking and certification for European sales; implementing product manufacturing and acquiring initial stock; and for working capital.

Following an aborted IPO planned for the end of 2017, the most recent placing was completed in February 2018, the company raising $1.33 million via a private placement at US$0.18 (13p) per share, giving Belluscura a post-money valuation of approximately US$3.7 million. This was at a discount to the May 2017 placing which was completed at a price of 51p per share, valuing Belluscura at $7.6 million at that time. Additionally, along with the February placing Belluscura converted loans valued at c.$268,000 to equity under the same terms as the placing.

The proceeds will be used for further product development, specifically for the CURV™ oxygen concentrator, the Snap III™ level of consciousness monitor, and for general working capital purposes.

Tekcapital invested $250,000 in the placement, converted loans valued at $210,090 to equity and was issued with a three-year warrant to purchase 1,273,078 new Belluscura shares at 13p per share.

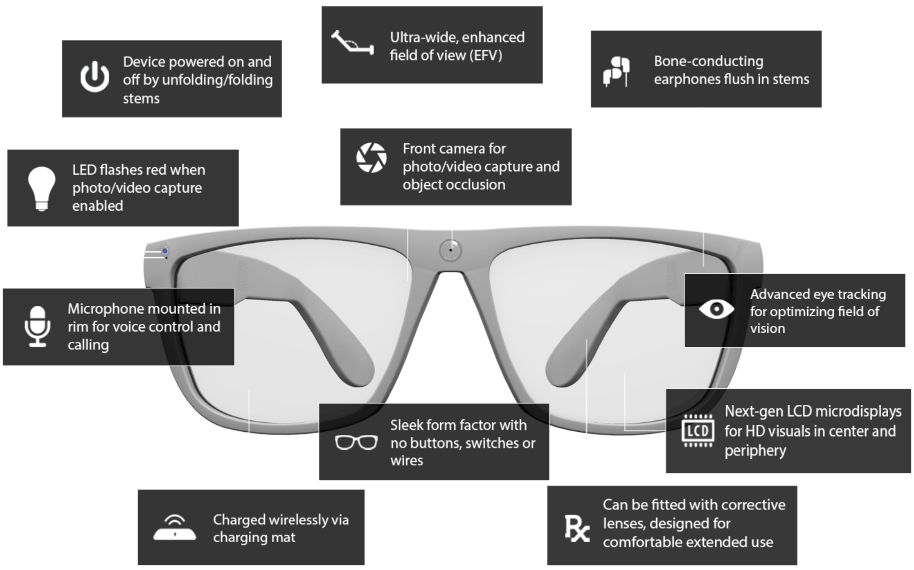
Lucyd Pte Ltd

lucyd

In April 2015 Tekcapital acquired the exclusive worldwide licence to a portfolio of 13 optical technology patents from the University of Central Florida in return for 479,060 new Tekcapital shares. The patents enable the development of new, small form, lightweight and see-through high-resolution, head-mounted projection displays with eye tracking. Suitable for collaborative augmented reality (AR) applications, the patents are able to support a wide range of consumer, medical, military and industrial applications. **The company is targeting a market which according to analysts at Zion Market Research is predicted to reach $133.78 billion by 2021.**

Lucyd is now at the stage where it is looking to develop prototype AR glasses (which will be known as Lucyd Lens), with the prototype launch planned in early 2019. A team has been put together which includes seven Ph.D. scientists and advisors. The goal is to produce next-generation smartglasses that correct many of the issues plaguing currently available products. Lucyd Lens is planned to be the first that is lightweight, ergonomic, accommodates corrective lenses and appears like a normal pair of glasses. It will be an interactive AR peripheral compatible with existing Android and iOS content, while also supporting Lucyd-native content. To help achieve its goal, Lucyd has formed strategic alliances with more than 10 companies to develop AR and security software for the smartglasses.

Lucyd recently completed a successful blockchain "token generation event", receiving $6.1 million in contributions from the issue of digital tokens. The proceeds will be used to fund the development of its augmented reality glasses and software apps, to progress the business plan and for working capital. Notably, the funding will not be dilutive for Tekcapital shareholders as the tokens confer no ownership or voting rights in Lucyd. Instead, the tokens will be able to be used by holders to purchase smartglasses and apps developed by the company, to reward app developers and reviewers and for in-glass transactions.



Lucyd Lens 1.1. Artist's simulation. Actual geometry and features of prototype glasses may vary
Source: Lucyd whitepaper

Salarius Limited

In June 2016 Tekcapital acquired US patent #8,900,650 B1 for low-sodium salt compositions, which has the potential to enable the commercialisation of a 1:1 replacement for regular salt in a variety of applications including table top, dry snacks such as chips and crisps, popcorn, cereals, and other dry surface applications that have salt in spice mixes. The Salarius product (or µSalt™) has up to c.67% less sodium by weight than standard table salt due to its smaller size ("microsalt"), claiming to be the world's smallest salt crystal. Because of its smaller size the salt dissolves faster on the tongue to produce the same level of saltiness. It does not contain substitutes like calcium, potassium or magnesium salts, which, like in many existing low-sodium salt products, can have a bitter taste.

Test quantities of Salarius have been produced by the company, with a number of taste tests having been carried out. A university controlled study found that Salarius *"…achieved 55% reduction of sodium content while achieving taste parity with the flake salt control,"* and that *"no statistically significant differences were found in perceived saltiness…among 20 judges on three occasions."* The test was done with traditional potato chips as a control and chips salted with Salarius. The Salarius salted chips were shown to have 55% less sodium than the control.

The product meets a growing need for the reduction of sodium in salt containing products, driven by the negative health effects that excess sodium consumption can cause. In the US, the FDA suggests that Americans consume almost 50% more sodium per day than is recommended, with this potentially leading to conditions such as pre-hypertension, high blood pressure and, ultimately, heart disease, stroke and kidney disease. **The FDA estimates that lowering salt intake by 40% could save 500,000 lives and c.$100 billion in healthcare costs over a decade.** In 2016 the FDA proposed guidelines to reduce sodium consumption by over 30% over the next 10 years, with 150 food product categories being targeted. In the wider industry, a number of world leading food manufacturers including Kraft, Mondelez, Nestlé, General Mills and Mars Food, have recently announced that they will be reducing salt levels in their products.

Out-license negotiations are ongoing with leading companies, with the company looking to take advantage of opportunities in a table salt market which research firm IBIS World estimates was worth $598.7 million in 2013.

Smart Food Tek Limited

In January 2015 Tekcapital acquired an exclusive worldwide licence from the University of Arkansas, Division of Agriculture, for a coating for baked products that imparts the attributes of fried foods. The invention, known as Crackle-Baked®, uses the application of enzyme-modified starch as an oil delivery system, bringing liquid oil into a powdered or wet batter coating for food products. The Crackle-Baked® process can be incorporated into existing coating lines without modification and uses all commercially available products. The process reduces the fat content in the finished product by approximately 60%, enabling consumers who enjoy fried foods to benefit from a healthier diet.

In October 2016 the company received a Notice of Allowance for a second patent application relating to process, which has been exclusively licensed to the company from the University of Arkansas under the existing agreement.

Tests have shown that Crackle-Baked® coated products, when baked, have the texture and appearance of fried products, with no significant difference in taste. The results were published in the Journal of Food Science in May 2014 (*Enzyme-Modified Starch as an Oil Delivery System for Bake-Only Chicken Nuggets*, Sarah Purcell, Ya-Jane Wang* and Han-Seok Seo, Volume 79, Issue 5).

The study reported that sensory attributes related to fried foods (such as crispness and mouth-coating) did not significantly differ between bake-only nuggets formulated using enzyme-modified starches and partially fried and baked ones. The findings suggest that enzyme-modified starches can deliver sufficient quantity of oil to create sensory attributes similar to those of partially fried chicken nuggets, something which has not been done before through a baking process.

Development of the product is ongoing, with discussions with leading companies. Obvious potential customers include large food producers, which are focused upon developing healthier products, and restaurants, with sales in the US chicken restaurant industry being $19.1 billion in 2013 according to market research firm Technomic.

Frigidus Limited

Frigidus has a portfolio of nine patents, developed at the University of Central Florida (UCF) Florida Solar Energy Center, which improve the performance of outdoor air conditioner condenser fans and heat pump assemblies. This is a market where in the US, according to the Air Conditioning, Heating, and Refrigeration Institute, there were 4,545,876 central air-conditioning units sold in 2015.

The technology is designed to achieve up to a 25% performance improvement in condenser fan operations compared with existing air conditioning units. The designs utilise twisted shaped blades with optimised air foils for improving volume of air flow and at the same time minimising motor power. The technology can also reduce undesirable sound and noise levels, an important objective for air conditioning condenser fan system manufacturers.

In December 2016 the portfolio was exclusively out-licensed to Wecast Technology Group, a subsidiary of Sun Seven Stars Entertainment & Media Group Limited, a private media and investment company in China, for the life of the IP. The terms of the licence included an up-front payment to Tekcapital of $100,000 and a 5% royalty on sales.

Non Invasive Glucose Tek Limited

Developed at Purdue University, USA, Non-Invasive Glucose Tek has a glucose breathalyser (patent pending) which can measure glucose concentration in exhaled breath. The glucose monitor consists of a breath condensing unit that monitors the temperature, volume, and glucose concentration of exhaled breath along with a condenser for background air. The glucose concentration of exhaled breath condensate is corrected for the humidity and glucose concentration of background air in order to deliver more reliable measurements compared to those of similar technologies.

Accurately measuring the concentration of glucose in exhaled breath may allow non-invasive estimation of glucose concentration in blood, which in turn could be used for the painless and routine monitoring of blood glucose concentration in diabetic patients. Current invasive monitoring methods, such as taking blood samples, often discourage patients from making the frequent measurements needed for careful regulation of glucose. However, there is no currently commercially available device to collect exhaled breath condensate and measure its glucose level.

This could be critical in reducing deaths from the disease, which according to the World Health Organisation (WHO) has seen the number of sufferers rise from 108 million in 1980 to 422 million in 2014. **The WHO also estimates that diabetes will be the seventh leading cause of death globally by the year 2030, providing a large market for the company to target.**

eSoma Limited

In May 2017 Tekcapital acquired the worldwide exclusive licence from the University of Central Florida to a software program and patent application for enhanced gesture recognition for computing devices. Known as Trace-It™, the software has the potential to enhance the accuracy and speed of the detection of gesture and character inputs across a wide range of mobile and desktop devices such as smart phones, tablets and computers.

When a touch-sensitive device is provided with 2D input drawn with a stylus or made with a finger, synthetic data is produced by the software using a method called Gesture Path Stochastic Resampling. GPSR intelligently selects random points along a 2D or 3D trajectory, and scales the spaces between the points to create realistic variations of a given sample. The resulting series can be translated, scaled, skewed and rotated, as necessary. This requires minimal coding to implement and rapidly decodes analog gesture input, improving the accuracy and the speed of gesture recognisers.

The target is to sub-license the technology to a leading consumer electronics or software company.

eGravitas Limited

eGravitas holds exclusive licences to patents from the University of Michigan and Georgia Tech Research Corporation in relation to technologies which enable the harvesting of energy from human motion.

The first patent (WO 2014/12690) relates to a piezoelectric vibrational energy harvester – piezoelectrical being the ability of certain materials to generate an electric charge in response to applied mechanical stress. A small transducer based on the technology can be incorporated into sportswear such as training shoes in order to harvest energy generated, for example, during a training session.

The second patent (U.S. # 8,368,290) relates to a rectifier-free energy harvester/battery charger circuit. The circuit captures electrical energy from a piezoelectric source and converts the small amounts of energy generated by piezoelectric transducers from AC to DC with a power cache that can used to charge supercapacitors or batteries.

Key applications are expected to include in-shoe power generation for recharging mobile devices and a range of wearable electronic sensors for monitoring and location applications. Development of the technology is underway, with the aim being to create a prototype in-shoe system and then license the technology to leading footwear companies.

Guident Limited

Guident Limited was established by Tekcapital in 2017 to exclusively license and commercialise new technology to enhance the utility, safety and enjoyment of autonomous vehicles and drones. The overall goal is to develop a family of apps and provide them to autonomous vehicle manufacturers and their customers.

In line with this strategy, in October the company exclusively licensed U.S. Patent 9,429,943 from Florida Agricultural and Mechanical University. The patent has the potential to enable the development of software apps for controlling autonomous vehicles such as cars, trucks and drones using artificial intelligence. The company believes that this could be used to develop apps that allow users of autonomous vehicles to dispatch their vehicles to find available parking spots and park themselves and later retrieve the users of the vehicle when they are ready to go on to their next destination. **This business is targeting an autonomous vehicle market which, according to analysts at Research and Markets, is expected to grow at a CAGR of 39.6% from 2017 to 2027 to reach $126.8 billion by 2027.**

Financials

Tekcapital has released three sets of annual accounts as a public company to date and they reflect increasing growth from the IP services business (CAGR of 179% from 2013 to 2016) as well as the move towards creating value from university IP. Results for the year to November 2017 will reflect a change in accounting policies as compared to previous year, as further discussed below.

Year to 30th November	2013A	2014A	2015A	2016A	2017H1
Revenue ($)	35,213	210,337	407,420	764,777	3,806,178
Operating result ($)	-44,709	-993,711	-1,460,704	-2,558,512	1,554,796
Net assets ($)	-21,915	1,717,000	3,719,217	3,137,074	7,947,906

Table: Tekcapital trading history. Source: Company accounts

As a public company Tekcapital has been financed via equity placings, with no borrowings having been taken on.

Date	Gross proceeds (£m)	Price per share (p)	Shares issued
4th April 2014	2,000,000	25	8,000,000
6th May 2015	2,150,000	20	10,750,000
26th Jan 2017	2,438,975	35	6,968,500

Table: Tekcapital placings. Source: RNS announcements

2017 Interims

Numbers for the six months to 31st May 2017 were positive, showing revenue from services for the period up by 157% at $635,329. An additional $2.94 million unrealised profit was recognised as other operating income following a revaluation of the investment in Belluscura at the half year end following the company's $1.7 million placing in May.

A further $226,656 profit on derecognition of previously consolidated subsidiaries (see below) took total revenue for the period to $3.81 million, with a statutory net profit of $1.55 million being made for the period compared to a loss of $997,174 in H1 2016.

Change in accounting policy

During the period Tekcapital adopted a new accounting policy, triggered by the classification of the company as an investment entity under IFRS 10. This is consistent with the focus of investing in and commercialising university IP, as well as providing intellectual property investment services and advice to create market value. As a result the company now measures and evaluates the performance of substantially all of its investments on a *fair value* basis.

Following the change Tekcapital discontinued the consolidation of Belluscura and its other portfolio investments effective 1st May 2017, with assets and liabilities of the investments eliminated from the balance sheet. Services businesses Tekcapital Europe Limited and Tekcapital LLC continue to be treated as subsidiaries and consolidated in the group financial statements.

The new policy determines fair value for new portfolio companies at the cost of the acquired IP or equity plus associated expenses to facilitate the acquisition. Existing portfolio companies are either valued upon the basis of a recent market transaction, such as the receipt of third-party funding, absent any observed material changes during the period. In the absence of a recent market transaction, fair value will be estimated by alternative methods and where appropriate by an external, qualified valuation expert.

Balance sheet

Following the accounting changes the fair value of the portfolio at the period end was determined to be $4,148,349. As the table below shows this was mostly made up of the valuation attributed to Belluscura. Given their early, pre-commercialisation stage of development, and in line with the new accounting procedures, the other companies are currently valued at cost of the acquired intellectual property plus associated expenses.

Elsewhere, following the $3 million (over-subscribed) placing completed in January at 35p per share, cash at the period end stood at $3.14 million, up from $1.84 million six months previously. The company has no debt. Net assets grew by 153% to $7,974,906 over 12 months, with net assets per share up from $0.09 to $0.193.

$	**Value as at 01/12/2016**	**Additions**	**Fair value increase**	**Value as at 31/05/2017**
Belluscura Limited	0	731,930	2,944,193	3,676,123
Non Invasive Glucose Tek Limited	0	24,657	0	24,657
Lucyd Limited	0	183,030	0	183,030
Smart Food Tek Limited	0	47,365	0	47,365
eGravitas Limited	0	150,024	0	150,024
Frigidus Limited	0	52,500	0	52,500
eSoma Limited	0	0	0	0
Salarius Limited	0	14,650	0	14,650
TOTAL	**0**	**1,204,156**	**2,944,193**	**4,148,349**

Table: Movements in fair value of Tekcapital portfolio companies. Source: Company accounts

Management

Chairman - Clifford M. Gross, Ph.D.

Cliff is a successful executive with 25 years of leadership experience in academia and commercial enterprises. He founded Biomechanics Corp and Utek where he served as CEO and Chairman, was president and CEO of Innovacorp, the provincial venture capital fund of Nova Scotia, and He has served as acting director of the graduate program in biomechanics and ergonomics at New York University, Chairman of the Nelson Rockefeller department of biomechanics at the New York Institute of Technology and Research Professor at the University of South Florida. Recently, he authored “Too Good to Fail: Creating marketplace value from the world’s brightest minds” and is a named inventor of 19 issued patents and one patent application. Cliff is a fellow of the National Academy of Inventors and serves on the board of directors of the Technology Transfer Society and the State University of New York at Empire State College. He received his Ph.D. from New York University and an MBA from the University of Oxford.

Finance Director - Malcolm Groat

Malcolm Groat has worked for many years as a consultant to companies in technology, natural resources, and general commerce. Following an early career with PWC in London, he held CFO, COO, and CEO roles including Executive Chairman Med Mining and Minerals Ltd; and Group FD and COO of E C Harris LLP. Malcolm currently serves as a non-executive director and chairman of the audit committee of Baronsmead VCT 4 plc and Corps Security plc. He is a Fellow of the Institute of Directors, Fellow of the Royal Society for the Encouragement of Arts, Manufactures and Commerce, and Fellow of the Institute of Chartered Accountants in England and Wales. He holds degrees from the universities of St Andrews in Modern History and Politics (MA) and Warwick (MBA).

Non-executive director - Bill Payne

Bill Payne is a proven, successful International leader with over 25 years of executive and management experience, who has lived and operated in the US, Asia and Europe. Over the last 20 years he has had wide ranging responsibilities in the Consulting, Business Services and Outsourcing sectors. Since 1997 Bill has served as an executive with IBM. Most recently, as Vice President of Business Transformation Outsourcing where he spearheaded the development and delivery of global process and technology services, with a $3 billion pipeline and over $500 million of new business annually. Bill received a BSc Hons in Chemical Engineering from Leeds University, is a Chartered Engineer, Fellow of Institution of Chemical Engineers and Fellow Institute of Petroleum. Bill sits on IBM’s academic liaison board in the UK and is a Venture Capital partner at Octopus Investments. He lectures at INSEAD, Henley, and Cass Business Schools and is a member of the President’s Committee of the Thames Valley Chamber of Commerce and Livery Company of Marketors in the City of London.

Non-executive director - Robert Miller

Robert serves as Vice Chairman of the Board of Trustees of the Mayo Clinic Health System – Albert Lea and Austin, Professor of Radiation Oncology at the Mayo Clinic in Jacksonville and Medical Director of the Mayo Clinic’s Operations in Northfield. Professor Robert Miller is a physician-executive at the Mayo Clinic, where he has been employed for the last 21 years. He has more than two decades of experience in oncology research and is the author of over 130 peer-reviewed papers. Robert has successfully led a series of national, NIH funded Phase III clinical trials searching for new pharmaceutical solutions to reduce symptoms of cancer therapy. Robert also serves as a director of

Tekcapital plc. Robert began his scientific career as a medical physicist at the University of Kentucky, before going on to graduate from medical school at the University of Kentucky. Robert also received an MBA from Oxford University.

Key Risks

Successfully exploiting acquired IP

Tekcapital's long-term investment case rests upon its ability to successfully realise value from the portfolio of intellectual property which it acquires. Despite the company's considerable experience across a range of industries this can not be guaranteed.

However, the risk of failure is reduced by the company's unique industry business model. Typically, acquisitions are structured to involve a small upfront payment (either in new Tekcapital equity or cash) for an exclusive licence to the IP along with a revenue share. This helps to keep costs low, reduce the financial cost of any one particular technology failing to be commercialised and increase the upside from those that are. The focus on out-licensing or sale to third-parties after adding value through, for example, building prototypes or enabling early marketplace adoption also helps to shorten the time horizon from acquisition to revenue generation/value creation.

Finding and acquiring IP

The ability to find and acquire potentially commercially lucrative IP is also a risk to the investment case. Selection bias is mitigated by the company having access to over 4,500 universities in 160 countries worldwide via its proprietary Innovation Discovery Network, providing access to a vast range of uncommercialised technologies. Further, technologies are screened for near term entry to the marketplace. This is achieved by carefully selecting technologies where the research has been completed and only additional development is required; the "D" of the "R&D."

Funding risk

In order to support its expansion plans and invest in future technology Tekcapital may require further funding. In the past, funding rounds have been undertaken via placings of new ordinary shares in the business. However, investor appetite for such further issues is not guaranteed, placings may be completed at a discount to the prevailing share price and will be dilutive to existing investors. It will also be a challenge for Tekcapital to attract financing for its portfolio companies from third-parties investors. While having exclusive licences to a range of intellectual properties, Tekcapital is a relatively small business and faces competition in its areas of interest from big businesses with significantly larger financial resources.

Exchange rate risk

Tekcapital holds cash deposits in sterling and reports its financial performance in US dollars, exposing the company to changes in the value of the two currencies against each other. With the shares being priced in sterling, fluctuations in the value of sterling against the US dollar may have an effect on the valuation that the shares are awarded by the market.

Valuation

Forecasting the financials for an IP investment company, especially one with very early stage investments, is a difficult if not impossible task given the many variables that could affect it at any one time. Potential uplifts in the fair value of portfolio companies - which are the main driver of shareholder value and are accounted for through the P&L statement - are simply not known until they happen. However, in terms of the underlying P&L, we point out that Tekcapital's services business is growing rapidly, with strong momentum continuing to be seen.

Service revenues grew at a CAGR of 179% from 2013 to 2016 (albeit from a low base) and in the first half of 2017 alone were 83% of the total posted for the whole of the whole previous financial year. We expect further growth in services revenues, perhaps at high double digits for the current financial year, and believe that the company's ambition is to eventually cover its total administration expenses from such income.

To illustrate the current valuation of Tekcapital we compare the business to other UK listed IP peers. We identify seven other peers but omit life sciences investor **Amphion Innovations (AMP)** as an anomaly as the company has a complex debt structure and negative net asset position due to large historic losses.

Company	EPIC	Year founded	Capital raised since inception (£m)	Current market cap (£m)	Net Assets (£m)*	Price to book value
IP Group	IPO	2001	1242.7[1]	1,165	1471.6[1]	0.79
Allied Minds	ALM	2004	309.9	315	383.8[1]	0.82
Mercia Technologies	MERC	2014	118.2	115.7	123.6	0.94
NetScientific	NSCI	2008	57.5	37.6	15.1	2.49
Frontier IP	FIPP	2007	11.6	33.9	11.76	2.88
Tekcapital	TEK	2014	6.9	8.3	5.78	1.44
					AVERAGE	**1.56**

** as at last published balance sheet date*
[1] estimated
FX rate = £1:$1.378

Company	Year end	Full Year Revenues (£m)	Full Year Net Income (£)	Half Year Revenues (£m)	Half Year Net Income (£)
IP Group	Dec	7.6	-14.8	34.5	18.4
Allied Minds	Dec	2	-96.8	1.43	-42.31
Mercia Technologies	Mar	6.66	0.99	4.85	1.43
NetScientific	Dec	0.52	-12.4	0.16	-5.16
Frontier IP	Jun	2.31	1.23	Not released	Not released
Tekcapital	Nov	0.58	-2.05	2.76	1.39

Tables: UK listed IP companies analysis. Exchange rate of £1:$1.378 assumed. Source: Align Research.

For the peer valuation analysis above we have made several adjustments. Firstly, **IP Group (IPO)** completed the all share takeover of **Touchstone Innovations (IVO),** which has since been de-listed, in December 2017**.** We therefore adjust IP Group's net assets and capital raised to include the value of Touchstone.

For **Allied Minds (ALM),** as the company exercises control over all of its investments in subsidiary undertakings their activities are fully consolidated in the group accounts and the value of those investments is not separately disclosed in the balance sheet. Instead a measure known as Group Subsidiary Ownership Adjusted Value (GSOAV) is used, which represents Allied Minds' interest in the equity value of each subsidiary. The GSOAV was estimated at $415.8 million as at 30th June 2017. Combining the subsidiary valuations with the holding company's cash position of $113.3 million we attribute a net asset value to Allied Minds of $529.1 million, or £383.8 million at current FX rates.

For Tekcapital, we did not adjust down the value of the company's NAV as at 31st May 2017 to take into account the implications of the February 2018 Belluscura placing and loan conversion. This is because we expect that, following the successful token sale, Tekcapital will commission an independent, up to date valuation for Lucyd. While the valuation is unknown at this stage, we expect that it could more than offset the reduced Belluscura valuation discussed above. We expect that a valuation for Lucyd amounting to around 1 times the funds raised ($6.1 million), less any company liabilities, would be justified. Therefore, with the Lucyd stake valued at just $183,030 as at 31st May 2017 this would represent a significant uplift in value and more than offset the recently reduced value of Belluscura.

In terms of price-to-book value (or premium to NAV) we calculate a sector average premium of 56% - investors often apply a premium to NAV for IP companies as they anticipate future increases in the fair value of their investment portfolios. **Tekcapital currently trades at a premium of 44% to net assets as at 31st May 2017 so is valued at a modest discount to the sector average.**

We also note that c.75% of Tekcapital's current portfolio value is derived from one investment – Belluscura. The remaining 25% comes from the eight other portfolio companies which are conservatively valued at cost of the acquired intellectual property plus associated expenses. **Therefore, an uplift in the valuation of any one additional portfolio company, driven by a fundraising or other value event, could have a significant impact on the balance sheet and increase NAV.**

Conclusion

Tekcapital's business model offers the potential for a more efficient path to market for university IP than the traditional venture capital approach, with the low cost of IP acquisition ultimately providing the potential for an increased return on invested capital. Further, we view it as impressive, that in under four years, with a modest amount of capital raised compared to all of its peers, Tekcapital has grown a unique university IP investment company, acquired 59 property rights, produced significant value enhancement (as evidenced by Belluscura's and Lucyd's performance) and has simultaneous grown a complimentary IP investment service business with global tier-1 clients and research institutions.

We add that management believes any one of the current investee companies has the potential to ultimately command a valuation higher than Tekcapital's current market cap. The growth in the services business validates the wider model, with revenue growth from this area looking set to continue and eventually cover group admin costs in the medium to long-term. **Backed by a strong management team, wider support from the scientific advisory panel and exposure to a number of rapidly growing industries, we initiate coverage of Tekcapital with a Speculative Buy stance.**

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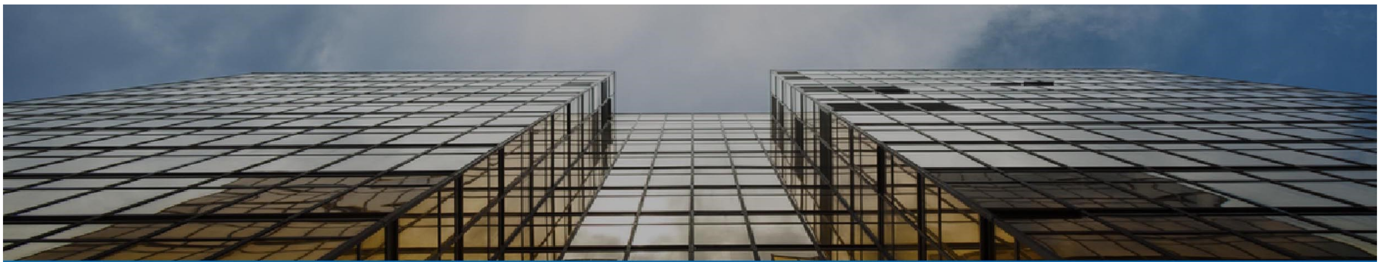

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