



Life Science Valuations for 409A

Problem: How does an early to development stage life science firm with a pipeline of opportunity obtain an independent, knowledgeable, and cost effective valuation for 409A compliance?

Solution: Use a strategy and valuation firm that understands FDA-regulated industries!



Trout Creek Consulting (TCC), a management consulting firm based in the mid-Atlantic region, offers strategy and valuation services to both public and private firms in the FDA-regulated biomaterial, biopharmaceutical, medical device, pharmaceutical, cosmetic, food ingredient, nutraceutical, and oral care industries.



At TCC, **we help clients create value through improved decision making** by providing Actionable

Strategies, Market Understanding, Objective Valuations, Business Simulations, and Corporate Development.

What is Section 409A?

The American Jobs Creation Act of 2004 added Section 409A to the Internal Revenue Code. Section 409A generally provides that unless certain requirements are met, compensation deferred under a nonqualified deferred compensation plan for all taxable years is currently includible in gross income to the extent that the deferred compensation is not subject to a substantial risk of forfeiture and not previously included in gross income. Stock

options and stock appreciation rights may be exempt from Section 409A if they satisfy specified conditions including this critical requirement: the exercise price may never be less than the fair market value of the underlying stock on the date that the option or right is granted.

What does TCC offer?

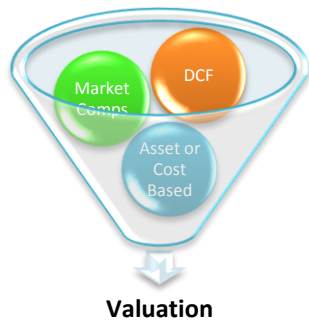
TCC offers an independent, impartial, and objective appraisal of the fair market value of a business and its equity classes.

What valuation methodologies does TCC use?

Early to development stage life science firms present unique valuation challenges. These firms typically have little or no ongoing revenue with few tangible assets. Value is created by achieving milestones in expensive multi-year development programs subject to a diverse range of pressures and outcomes. Eventual product marketability is subject to complex regulatory, reimbursement, clinical, competitive, and intellectual property factors that may vary by country. Additionally, most capital structures consist of multiple equity

classes; each class may have a unique payoff depending upon business and liquidity event outcomes.

TCC uses multiple approaches to triangulate on a valuation and then test its sensitivities. We use all three valuation methods as appropriate: income or discounted cash flow (DCF), market comparables, and asset- or cost-based. For complex, uncertain situations, we have found simulations using DCF with decision tree analysis and market comparables to be a very useful combined approach.



To allocate value across equity classes, we use the probability-weighted expected return (PWERM), current-value, and option-pricing methods as appropriate. We test sensitivities by both simulating specific scenarios of high interest or concern and using Monte Carlo analysis.

As an independent, objective, and impartial appraiser, TCC's role in 409A valuations is to test management's business assumptions for reasonableness and then value the business and associated equity classes. Our role as an appraiser is not to create client strategy. However, since TCC understands FDA-regulated industries, we can provide estimates of clinical success, liquidity event outcomes, and other valuation inputs if the client doesn't already have this information.



What is TCC's valuation process?

An initial valuation engagement will typically take 3-6 weeks of elapsed calendar time. The availability of information and the complexity of the business to be valued determine the schedule. Once we complete an initial valuation engagement, our subsequent valuation updates will take considerably less time provided that the business' product and technology portfolio, assets, and liabilities are substantially the same.



As first steps, TCC will request and review business information that we require to generate an independent, objective, and accurate valuation. This information includes historical financial statements; business plans with projected performance; plans for

development, manufacturing, and sales; information on equity classes, ownership, and transactions; management's assumptions regarding the business and possible liquidity events; and other relevant information.

As part of the initial review, TCC will determine the appropriate valuation methodology, assemble first pass market comparables, determine appropriate discount rates to use, and prepare questions for the interview with business management.

The interview with business management is a crucial step in the valuation process. At this interview, management will typically discuss their assumptions regarding the business and its potential end states. TCC will present its valuation methodology, first pass market comparables, chosen discount rates, and questions for management. TCC and management will identify the remaining data gaps to be filled or estimated, if any.

Following the interview, TCC will prepare the valuation, including determination of control premiums and marketability discounts if appropriate. Finally, TCC will review the valuation with the client and prepare the formal Valuation Report.

Why is TCC cost effective?

Once TCC has provided an initial 409A valuation to a client, TCC will provide up to three updated valuations of the business at a reduced rate¹ over the 24-month period following the "as of" valuation date for the initial valuation. Frankly, we expend less effort to update an existing valuation over a finite time frame; consequently, we think our clients should share in the savings.

What standards does TCC satisfy?

TCC's 409A valuations are prepared in compliance with the following standards:

- ✓ **Uniform Standards of Professional Appraisal Practice, Standard 9 (Business Appraisal, Development), 2008-2009**
- ✓ **Uniform Standards of Professional Appraisal Practice, Standard 10 (Business Appraisal, Reporting), 2008-2009**

TCC's 409A valuations also reference the following standards and guidance as appropriate:

- ✓ **American Institute of Certified Public Accountants, Statement on Standards for Valuation Services 1, Valuation of a Business, Business Ownership Interest, Security, or Intangible Asset, © 2007**
- ✓ **American Institute of Certified Public Accountants, Practice Aid, Valuation of Privately-Held-Company Equity Securities Issued as Compensation, © 2004**
- ✓ **United States Internal Revenue Service, Business Valuation Guidelines, July 2006**

Are there other uses for a 409A-type valuation?

As mentioned earlier, early to development stage life science firms typically have capital structures consisting of multiple equity classes. Each class may have a unique payoff depending upon business and liquidity event outcomes. As subsequent funding rounds draw in new investors, it can be important to value and explain the capital structure for each class of investor depending on the outcome. A 409A-type valuation can accomplish this.



A 409A-type valuation may also be used to measure the progress of a firm for employee performance management purposes or negotiations with potential investors.

What are TCC’s other offerings?

Actionable Strategies that contain both the statistics and drivers answering “why?” and the industry view, gap analysis, action steps, resource requirements, specific target profiles, schedule, path markers, and valuation assessments that also answer “who?”, “what?”, “how?”, “how much?”, “when?”, “what if?”, and “how do we know we’re on the right path?”.

Market Understanding of an industry or segment, its evolution, structure, trends and drivers, sensitivities, opportunities, and the successful business models for today and tomorrow.

Business Simulations offering scenario analysis and predictive forecasts for products, businesses, and industries.

Immediate Impact Workshops to address specific, immediate, client needs: *Synergies in a DaySM*, *Competitive Gaming*, *Customer Segmentation and Management*, *Development Portfolio Management*, and *Negotiation Support*.



Corporate Development and Due Diligence Support to help clients implement acquisition, joint venture, alliance, and licensing initiatives.

How do I contact TCC?

To learn more about the 409A practice of **Trout Creek Consulting, LLC** as well as other offerings, please contact Hal Craig, Principal, at hcraig@troutcreekconsulting.com or by phone at 610-296-2370.

Visit our website at www.troutcreekconsulting.com

¹ Subject to the requirement that the business’ product and technology portfolio, assets, and liabilities are substantially the same

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