



Technology Licensing For Early Stage Companies: A Bridge to Innovation

ENET: Boston Entrepreneurs Network

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Co-Founder & CEO

Amplicea Therapeutics, Inc.

LJW Background

- **20+ years industry experience**
- **Early Stage Start-Up**
 - Current Co-Founder & CEO: Amplicea Therapeutics
 - Former President & CEO: Ventaira Pharmaceuticals (sold)
 - Director of Marketing: INO Therapeutics (sold to Ikaria)
 - OptimizOR: sold to Datex-Ohmeda
- **Venture Capital**
 - Venture Partner – Battelle Ventures
- **Big Company/Commercial Experience**
 - GSK
 - Merck
 - Datex-Ohmeda
- **Board of Directors:** Hepregen Corp.; CDI BioScience
- **Consultant:** Genomic Healthcare Strategies
- **Clinical Experience:** Duke, Medical College of VA, U of I
- **Education**
 - MBA, Washington University
 - BS, Biology/Nursing, U of I

Amplicea Therapeutics, Inc.

- Privately held emerging biotechnology company developing a transformational drug delivery platform technology that harnesses the body's own biology to amplify the delivery of drugs to the diseased site such as cancerous tumors.
- Mission: Amplicea seeks to develop cancer therapeutics that maximize the efficacy and minimize the side effects caused by systemic toxicity.

Amplicea: Value Proposition

- Revolutionary Drug delivery technology that is broadly applicable
 - Platform technology: AmpliCascade
 - Multiple product opportunities
 - In vivo POP
- World-class scientific team
- Solid experienced management and advisors
 - Expert leadership team with strong business and entrepreneurial experience
- Strong and growing IP position
 - Blocking patents
- Seminal publications

Licensing: Bridge to Innovation Objectives

- Review general rules and principles
- Discuss payment structures
- Review general terms
- Identify key areas of focus
- Outline red flags/landmines
- Lessons learned

An Entrepreneurs Fundamental Licensing Principles

- Cash is King – start-up capital is VERY expensive
 - Develop keen respect for cash
 - Minimize any payments – dilute the impact
- Align Interests
 - Work towards win/win
 - Become partners not adversaries
 - Decrease legal fees if negotiation goes smoothly
 - Determine the end game and work backwards – not a zero sum game
 - No hidden agendas
 - Fair valuation of technology
 - Honest and diligent representation of technology

An Entrepreneurs Fundamental Licensing Principles continued

- Do your homework
 - Know what you can live with and without
 - Devil is in the detail – read carefully
- Keep it simple – obligations/compliance
- Value created over next 5-10 years
 - Execution determines the outcome
- ***NO VALUE IS CAPTURED and NO \$\$\$ Made Without a Deal***

Payment Structures

- Upfront license fee
- Milestone Payments
- Royalty on revenue
- Equity
- Pay for (past/future) patents and related costs

Upfront License Fee

- **Upfront license fees**
 - Cash is expensive !
 - Amortize license fee over time – 3-4 years
 - Tie payments to success metrics
 - Consider trading license fee for equity
 - Credit upfront payment against future royalty
 - Large upfronts send the wrong message to Company:
“You won’t succeed & we’re going to get what we can”
 - Generally they will work with you
 - Large upfronts are poor use of limited resources

Royalties on Revenue

- **Royalty – structure depends on technology**
 - Excessive royalties adversely affect income statement
 - Unrealistic value on initial technology
 - May prevent business model changes
 - May prevent exit or require substantial renegotiation

Royalties – Payment Provisions

- Royalty – structure varies based on technology
 - Minimum annual royalty in exclusive deals
 - Ensure company is developing product
 - Option to convert to non-exclusive if not met
- Structures:
 - Running (earned) – net sales; tiered; fixed rate based on units sold; gross sales; profit based; step up; step down
 - Define upfront and understand the long term implications
 - Fixed royalties: easiest to calculate, avoids debate over profit
 - Profit based: difficult to calculate
- Royalty stacking – reduction in royalty rates with new licenses
 - Expect a floor
 - Company margin has to make sense – set a max
 - Align interests of licensors/company

Payment Structure cont.

- **Pay for patent and related costs**
 - Expect to pay maintenance fees if you have exclusive license
 - In US they are due 3.5, 7.5, 11.5 years
 - Can be significant, so plan
- **Equity – common stock**
 - Post Series A- 2-5%
 - Non-dilutive through Series A
 - Pari passu with pay to play provision after Series A
 - Never more than 10% regardless

Key Terms

- Definitions are critical – devil is in the detail
- **Field of Use** - Broad
 - Right to retract field if not pursued
- **Scope: Exclusivity** – University cannot compete with company
 - Co-Exclusive – no one will invest
- **Territory**
- Liquidation preferences
- Terms for liquidation- provision of change of control
- **Sublicenses**
- Grant back – two way
 - Company/University
- Patent prosecution
 - Company controls to ensure alignment of business strategy

License Red Flags

- Large Up Front Fee
 - Significant problem due to startup's limited cash reserves
 - Recommendation: *agree to a fair fee to show you are serious, but focus on milestones*
- Excessive Royalties
 - Adversely affect income statement
 - May prevent exit
- Lack of Exclusivity or Co-Exclusive Licenses
- Equity ownership stakes which adversely impact the cap table
- Liquidation preferences outside of purchased preferred stock which impute the exit value

How Problem Licenses Get Created

- Contentious negotiation – high level fees/wastes time
- Entrepreneurs don't understand the University process or University doesn't understand entrepreneurial process
- Disconnect between Licensing Personnel and Researchers
- Misaligned interests and expectations
- Conflicts in filing for and Control of IP
- Sequential negotiations post-financing

Lessons Learned

- Research is Never a product
 - Do the diligence upfront
 - Vet the value proposition
 - Takes lots of time/\$\$/effort to commercialize
- Execution is path dependent and determines success/outcome
 - Onerous terms ensure failure
- VCs bet on jockeys (management) not horses (technology)
- Original patents just starting point – superseded by new IP
 - 15% of patents are critical

What startup Companies Need in Tech Licensing

- A Technology Partner, Not An Adversary
- A Win-Win Relationship, Not A Zero Sum Game
- Respect for Cash
- Agreements that Align Interests
- Fair Valuations of Technology
- Honest and Diligent Representation of Technology
 - transparency
- No Hidden Agendas
- Move faster with less bureaucracy

Review Fundamental Licensing Principles

- Cash is King – start-up capital is VERY expensive
- Align Interests
- Do your homework
 - Devil is in the detail
- Keep it simple
- Value created over next 5-10 years
- ***NO VALUE IS CAPTURED and NO \$\$\$ Made Without a Deal***

“We Had the Experience But Missed the Meaning”

TS Eliot

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