MARKETS IN FOCUS

LIFE SCIENCES

Insurance Pricing & Market Update

Q4 2022

Introduction 2

2H Outlook 4

Major Claims in the Sector 9

Guidance 10

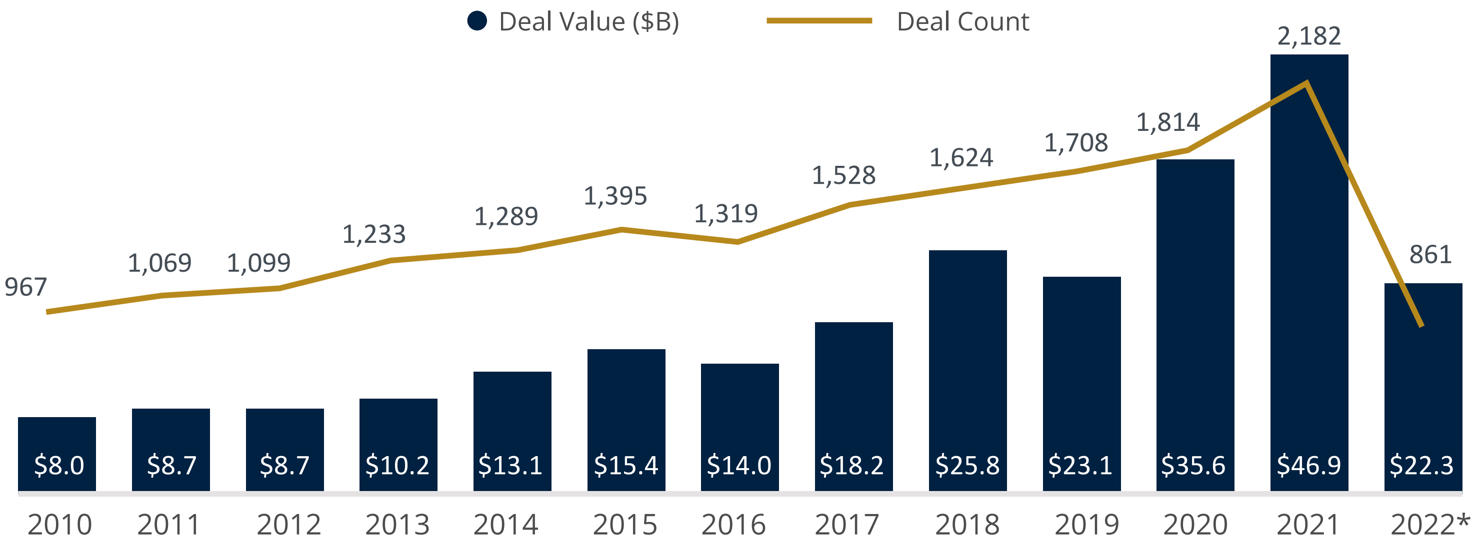
Introduction

Life Science companies are at the forefront of innovation, with a unique set of challenges when it comes to insurance. The global pandemic highlighted how important these industries really are and drove them forward in ways we haven't seen before; large amounts spent on research and development by private firms as well as through federal government. The rise in R&D expenditure across the Life Science sector will continue to drive industry growth.

+ The federal government alone is estimated to account for 51.5% of industry revenue in 2022.[1]
+ Life Sciences have become a very niche sector in commercial real estate, and like other accelerating sectors, they are experiencing growing pains.[2]
  - The demand for the space is being driven by promising new technologies and medical advancements arising from research to everyday miracles.[3]
  - Real Estate demand is expected to continue into 2023, especially for some mature markets like Boston, San Francisco and New York City.[4]
  - New markets are quickly gaining traction and bringing new investments as tenants are finding the established markets are too pricey or lacking their required space.[5]
+ The past two years have seen massive expansion with almost $70 billion of Private Equity (PE) capital and public National Institutes of Health (NIH) funding pouring into life science related companies in North America.[6]
+ All industries have pressure from investors to return a profit, however, when it requires FDA approval, it is especially challenging because of the lead time is longer than nearly all other industries to discover, develop and commercialize an approved product.[7]
+ The focus on quality can be challenging to sustain due to broader labor changes, supply shortages and constantly changing supply chain strategies and operations.[8]
  - Employers posted 622,087 Ads in the Life Science sector in Q2, 2022 which was up from 540,922 in Q1, 2022.[9] This represented about a 27% YoY increase.[10]
+ Some Life Science Sub-Sector YoY performance components included:
  - Research, Testing and Medical Labs (RTM) increased about 24%.[11]
  - Pharmaceuticals & Medicine Manufacturing (PMM) increased about 43%.[12]
  - Medical Devices & Equipment (MDE) increased about 10%.[13]
+ Numerous large pharma players are flush with cash (especially those that have COVID-19 treatments in their arsenal), which had led to swelling valuations. However markets are shifting and valuations are trending downward across the board.
  - Biotech valuations have particularly been impacted after benefiting from years of thriving markets as the 2025 patent cliff could result in disruption.

+ Q2 2022 presented a more difficult capital-raising environment for companies, but many investors committed to their best early-stage players and continued to write checks for a more selective population.[14] Public market declines diminished IPO values and led a handful of companies to put offerings on hold, with a 54.9% drop in the median IPO since 2021.[15]
  - Inflation and rising interest rates added to the lag in other exit types, with only $2.3 billion in acquisitions closed during the first half of the year, compared with $26.2 billion in 2021 and $16.6 billion in 2020 (excluding the $11.6 billion Pfizer/Biohaven acquisition – announced in Q2 but not yet closed).[16]
+ The US Federal Trade Commission (FTC) has increased scrutiny around larger deals, which could lead to 2022 and 2023 being years of bolt-on transactions in the $5B to $15B range as pharma companies take more action to make up for revenues lost to generic competition.[17]

Life Sciences VC Deal Activity



Sources: PitchBook | Geography: US
*As of June 30, 2022

2H Outlook

PROPERTY

As we round the corner on the second half of 2022 and the US struggles with inflation, the Consumer Price Index (CPI) has increased to 8.3% over the past 12 months.[18]

+ Inflation has been an ongoing struggle for the insurance industry, specifically with property valuations.[19]
  - Underwriters have been challenging valuations for properties and business interruption due to the recent deltas in reported value and total claims costs.
  - Third-party valuations have now become the norm for quotes, as carriers have been burned by significant deltas between what values are being reported verses the actual cost to settle a claim.
+ Coupled with inflation, larger deductibles (especially in CAT prone areas) have been an issue for insureds, along with more restrictive limits and conditions for difficult property risks and layering coverage with multiple carriers (contrast to just one carrier) for larger accounts.
+ Property exposed to wildfires are also receiving extra scrutiny from underwriters, with many carriers simply not providing capacity to this peril.
+ Business interruption coverage has seen more demand due to the supply chain and inflation worries, which generally causes an increase in coverage pricing, along with underwriting scrutiny.
  - Businesses with more complex and larger risk profiles should be prepared to provide supply chain maps, forensic accounting reports and engineering analysis to make underwriters more comfortable with writing their risks.

GENERAL PRICING ESTIMATES

Non-CAT exposed property with favorable loss history	Flat to single digit increases
CAT exposed property with favorable loss history	Flat to 10% increases
Property with unfavorable loss history and/or a lack of demonstrated commitment to risk improvement (unresolved recs, pattern of same issues, etc.)	10%+ increases for non-CAT 25%+ increases for CAT exposed accounts and higher depending on frequency/severity of losses and when there are limited markets for a risk due to occupancy/class of business or concerns related to loss control

CASUALTY

The industry has experienced nearly 24 months of drastic rate increases and capacity reductions, but things have moderated in recent months.

- For insureds with favorable loss histories, **General Liability** rates remain flat.
- Carriers generally look for more history of loss information, more details related to past losses and any relevant changes made to prevent future losses.
- Since court systems are still backlogged and catching up to pre-pandemic pace operations, carriers are being forced to hold reserves for losses for much longer than normal. Carriers will be expecting larger settlements and judgments from sympathetic juries, compounded with the pressure of social inflation, which is having a significant impact on appetite.[20]

Nuclear Verdicts (Verdicts Greater than $10M) have been more common in recent years, as plaintiff attorneys continue to work for increasingly higher awards, business can lower the chance of a nuclear verdict by implementing the proper risk management tactics.[21]

- One proven tactic includes, having proactive communication between your claims team and defense counsel. Outcomes can be detrimental to a business if the claims team has delayed communication on a case that could have been settled earlier but is now headed to court.[22]
- Having the most qualified defense counsel possible can mitigate the risk of nuclear litigation. In selecting a lawyer, claims leaders should use data from past cases to match their most compatible attorney with the right type of cases as they enter litigation.[23]

Umbrella/Excess – Capacity remains sufficient but lead Umbrella underwriting offerings are being required to reduce offered limits from traditional $25M layers to $15M and as little as $5M. Therefore, a stacking of insurance carrier tiers is generally needed to achieve desired limits.

Life Sciences companies have major liability exposures during clinical trial stages. It is essential to work with your team to make sure that the appropriate excess/umbrella limits are obtained for these potentially costly activities – especially if human trials are conducted.

Products Recall – Many recalls are voluntary, which means the drug or medical device manufacturers have decided to take the product off shelves, letting customers and doctors know to stop usage of the product, return it or require that the device be inspected to make sure it is safe to continue usage.[24] The FDA states that, majority of recalls are considered to have "a reasonable probability that the use or exposure to a violative product will cause serious adverse health consequences or death" – also known as Class 1 recalls.[25] This can give companies an advantage if they are ahead of the issues, both customers and legally.[26] Depending on the extent of their products, coverage for product recall policies can be very expensive and require an lengthy underwriting process.

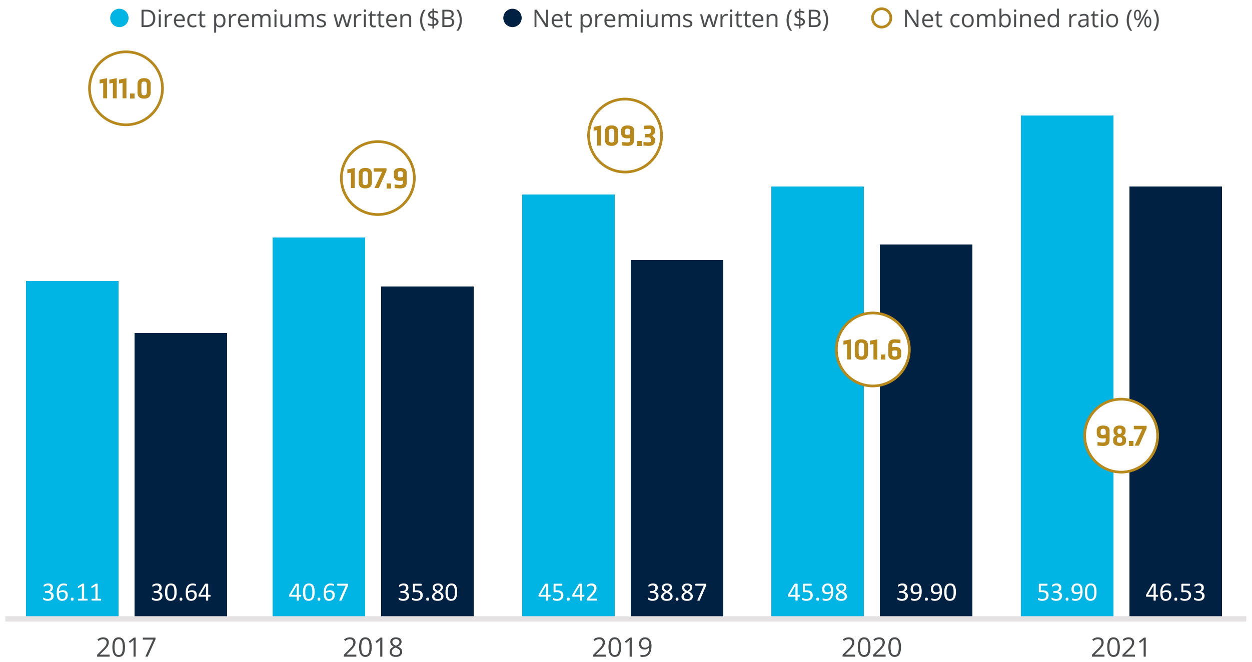
+ Generally, most **Product Liability** coverage forms only offer an "expense only" sublimit and limited coverage terms for product recalls. To address this, costly coverage gap, many carriers are offering standalone **Product Recall Insurance**, which is designed to provide coverage limits for re-testing costs, loss of income, costs associated with notifying customers and other expenses connected with a product recall that would typically only be covered by the **Products Liability** sublimits or not at all.

Commercial Auto is one of the most troubled insurance lines and history shows it, with 44 consecutive quarters of premium increases.[27] Loss ratios for the **Commercial Auto** industry were above 100.0 for the 10 years prior to 2021, which broke this streak by posting the first profitable combined ratio of 98.7. However, one positive year has not erased the unprofitability of the years prior, and pricing reflects this.

+ New "insurtech" entrants are driving the trend toward telematics implementation and adoption in the auto industry, which will allow underwriters more rate flexibility on new business, but also help insure less favorable drivers.[28]
+ The demand for fleet monitoring technology is on the rise, and many auto carriers are investing in telematics in hopes of improving loss ratios.[29]

Industry's combined ratio under 100% for first time in at least 5 years

Industry's commercial auto combined ratio dropped below 100% in 2021



Date compiled April 25, 2022.
Data reflects the aggregation of all individual property and casualty filers that submit regulatory statements to the NAIC. Based on the annual NAIC statutory property and casualty statements. U.S. filers only. May include business written outside of U.S., if reported in NAIC statement. Direct data is derived from exhibit of premiums and losses, prior to consideration of reinsurance for commercial auto physical damage, commercial auto liability, and commercial auto no fault reported lines of business. Net data is derived from insurance expense exhibit, after consideration of reinsurance for commercial auto physical damage in commercial auto liability reported lines of business. It was common practice to ensure premium credits during 2020 for auto insurers, but there was no standard practice for this among insurers. No effort was made in the exhibit to fully adjust the premiums for year over year premium growth beyond what was reported by each company. Combined ratios displayed hour before policyholder dividends. Source: S&P Global Market Intelligence.

Workers' Compensation continues to be the positive line of coverage for insurance purchasers and has been a profitable line of business for many carriers and capacity remains stable. Pricing will still be determined based off of loss history and Modification Factors, but carrier competition over accounts with adequate to strong loss history continues to help pricing.

GENERAL PRICING ESTIMATES

General Liability	Up 5% - 15%
Workers' Compensation	Flat to Up 5%
Auto	Up 10% to 25% Up 30% if large fleet and/or poor loss history
Umbrella & Excess Liability – Middle Market	Up 10% to 25%+
Umbrella & Excess Liability – Risk Management and other Complex/Hazardous Exposures	Up 25% to 150%

EXECUTIVE RISK

D&O

Over the past two years litigation has decreased in the D&O space, dismissal rates remain elevated and new capacity is entering the marketplace. Pricing for recent renewals has generally been more favorable than the past few years, this is more noticeable on excess layers of insurance.

+ Companies who are looking to IPO or de-SPAC transaction can continue to expect elevated pricing and retentions, but both are much more favorable that year ago levels.
+ D&O pricing is still largely dependent on a company's specific situation, therefore preparing the risk profile in the right way for D&O underwriters remains crucial.

The sharp decline in the number of IPOs and de-SPAC transactions in 2022 has contributed to improved pricing, which created a "hole" in the D&O carrier budgets that must be filled.

Looking forward over the remainder of 2022 and into early 2023, there is optimism that the trends we have seen over the last few months will continue to take hold, with additional pricing improvement and capital development.

An area that is under close watch is the shifting focus of the Security and Exchange Commission (SEC). In its most recent fiscal year, the SEC saw a record $6.4B in sanctions, which is ~40% higher than previous records.

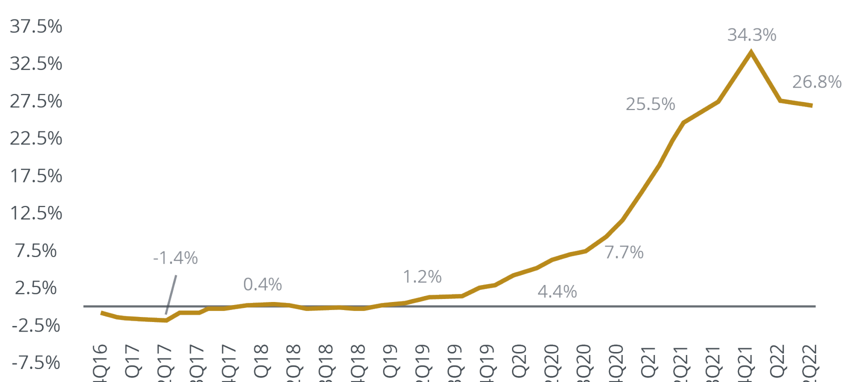
Cyber – The Cyber insurance market is best categorized as "transitioning out of a hard market"

+ Loss activity has decreased in the aggregate
+ According to Moody's Investor Service, the sector's loss ratio improved to 62% in 2021 from 65% in 2020
+ Frequency has decreased but severity remains an issue

Average and Median Ransom Payments in Q1 2022:

+ Average Ransom Payment: $211,529 (-34% from Q4 2021)[30]
+ Median Ransom Payment: $73,906 (-37% from Q4 2021)[31]
+ We continue to see a change in tactics amongst attackers. Due to improvements in data backups, the attackers are avoiding the encryption step altogether but focusing exclusively on stealing data and demanding payment to prevent disclosure of that data.
+ Carriers are still focused on "must have" controls and increasingly reliant on external scanning technology in risk assessment
+ Pricing increases are still the norm
+ According to the CIAB, the average premium increase in Q2 was ~27%
  - We caveat that is an average and certain industry groups continue to see substantially higher increases

Premium Change for Cyber, Q4 2016 - Q2 2022



Source: https://www.ciab.com/wp-content/uploads/dlm_uploads/2022/05/Q1-2022-PC_FINAL.pdf

Major Claims in the Sector

+ In November of 2018, a medical technology company has products which harmed patients when normal wear and tear to the metal-on-metal product released toxic metal particles into the recipient's body.[32] Due to the case being settle confidentially and numerous humans were impacted by this, total compensation was not disclosed, but the medical device company estimated payments to be around $1B.[33]

+ During November of 2014, Jurors in federal court settled with medical manufacturer, who's products were defective, and the company failed to warn doctors and their patients about the device's risks.[34] The company was ordered to pay $26.7M to a group of individuals who claimed injuries from the company's pelvic-organ implants.[35]

+ In 2019, two pharmaceutical companies resolved about 25,000 claims filed against their anticoagulant drug, patients filed complaints that the drug's use led to internal bleeding, stroke and even death.[36] Healthcare providers and patients were not informed properly about the risks related to the drug, resulting in life threatening complications.[37] Between the two companies involved, they both shared the $775M settlement evenly but did not admit any liability.[38]

Guidance

BEGIN THE RENEWAL PROCESS EARLY

The **General Liability, Cyber, Excess/Umbrella** and **Property** markets are constrained and more challenging to navigate in the disciplined market. With an outcome of increasing prices across all lines of business and in every industry sector, brokers are being swamped with submissions from their insureds who want to minimize these additional costs.

PARTNER WITH INDUSTRY EXPERTS

It is important to work with your broker's industry experts who truly understand the business and the market for placing the specific risk. Collaborating with a team who can best represent your risk, and partner with your operations, is more important than ever during this disciplined market we are experiencing.

HIGHLIGHT CYBER SECURITY & PROACTIVE RISK MANAGEMENT

Frequent and severity of cyber claims are constantly on the rise, resulting in more underwriter scrutiny of companies' cybersecurity hygiene. **The importance of highlighting any additions in cybersecurity staffing** or **updated systems protocol cannot be overstates.**

ENGAGE LOSS CONTROL TEAMS

Frequent communication with your broker's loss control team is a top priority, especially when a claim arises. Engaging your loss control team in the event of a claim can help reduce the impacts to your business financially and operationally. We work with you to understand your financial goals and operational challenges so we can identify, develop and deliver Risk Control Solutions that strategically mesh with your objectives

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More Than Just Insurance

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CT-MiF-IMA-LS-112122