

Investment Thesis: Positioning for Growth

- **Our research suggests that the fine chemicals/ pharmaceutical contract manufacturing segment of the specialty chemical industry will experience growth rates well in excess of industry average over at least the next two to five years.** We expect the fine chemical/pharmaceutical contract manufacturing industry to generate growth in excess of 15% per year as strong end-market growth combined with increasing utilization of contract manufacturers will drive this strong industry growth.
- **The fine chemical industry is expected to undergo massive structural change over the next two to five years as industry participants strive to achieve key success factors, including critical mass. We have identified several critical success factors that we believe will define the evolution of the industry.** We expect competitors to build expertise in these critical areas over the next several years in order to position themselves for growth. Today, the fine chemical industry is highly fragmented with no single competitor having greater than a 5% market share. Given the customer push for broader supplier capabilities both on a technology front and geographically, we believe consolidation is necessary and, consequently, inevitable.
- **We believe that two categories of “winners” will emerge in this industry: 1) those companies that are the most aggressive acquirers, achieving critical mass and industry leadership as rapidly as possible; and 2) those that are acquired.** Our research reveals that no clear industry leader has emerged. Based upon a number of factors described at length in this report, we believe seven to 10 major fine chemical manufacturers will materialize over the next two to five years.
- **Initiating coverage with STRONG BUY Ratings.** We believe both Catalytica Inc. (Nasdaq-CTAL-\$15 5/16) and Cambrex Corp. (NYSE-CBM-\$27) will either become successful industry consolidators or be consolidated themselves. In addition, we believe both of these companies are currently well-positioned to take advantage of the strong industry growth. Furthermore, we believe the management teams of both companies are extremely shareholder oriented. Therefore we initiated coverage of these companies with STRONG BUY ratings.

Executive Summary

Based upon our extensive research, we believe one of the fastest growing segments of the chemical/specialty chemical industry over the next five years will be fine chemicals/pharmaceutical contract manufacturing. By our estimates, the fine chemical/pharmaceutical contract manufacturing (CMO) industry will grow in excess of 15% per year over the next five years. By way of comparison, the overall specialty chemical industry is expected to grow 4% per year over that same time frame. This growth, coupled with what we believe will be MASSIVE structural changes in the industry over the short to intermediate term, will create rare opportunities for investors to generate substantial returns over the next five years.

We believe secular trends in the pharmaceutical and biotech industries will drive 15%-plus growth in the fine chemicals/CMO industry. In particular, we believe refined management focus in the pharmaceutical industry is driving increased utilization of outsourcing services across the industry in an effort to improve ROIC, reduce risk, and focus on core value drivers. In addition, we expect that pharmaceutical/biotech end-market growth will remain robust for the next several years. As a result, we estimate that these factors will drive growth in excess of 15% in the CMO industry over the next three to five years. In particular, we believe growth will be driven by:

- Strong market growth in both the pharmaceutical and biotechnology industries. IMS Health estimates that the global pharmaceutical industry will grow at nearly 8% compounded through 2002. Today the global pharmaceutical industry is roughly \$300 billion in size; IMS expects the size of the industry to grow to more than \$400 billion by 2002. IMS expects the North American pharmaceutical industry to grow at nearly 10% through 2002 to roughly \$170 billion.
- Increased penetration at the customer base. We anticipate that pharmaceutical manufacturers will increasingly utilize contract manufacturing. We believe that the following factors are driving increased utilization of outsourcing by the pharmaceutical industry:
 - 1) The pharmaceutical industry is focusing on the highest value-creating portion of its business: drug development and marketing. Manufacturing is becoming increasingly “noncore.” We believe that refined management focus in the pharmaceutical industry is driving increased utilization of outsourcing services across the industry.
 - 2) Need to shorten the drug development cycle: The industry is increasingly utilizing contract manufacturers in early-stage drug manufacturing to speed time-to-market of new compounds.
 - 3) Reduce the costs of developing record number of drug candidates: Through utilization of contract manufacturers, pharmaceutical companies do not need to invest capital in new production capacity to develop new drug candidates.
 - 4) Increased focus on improving return metrics: ROIC, ROA. Increasing utilization of return-based management philosophies, such as ROIC, EVA, etc., is driving decision making across the pharmaceutical

industry. The use of contract manufacturers enables pharmaceutical customers to maximize their returns.

- 5) Increased complexity of molecules: The manufacture of increasingly complex molecules requires greater focus. Contract manufacturers who focus on complex routes to molecules are generally able to manufacture these more efficiently and master unique niche technologies.
- 6) M&A activity in the pharmaceutical industry is driving asset sales: We expect that M&A activity in the pharmaceutical industry will result in increased asset sales to contract manufacturers.
- 7) Emergence of virtual pharmaceutical companies. Virtual pharmaceutical companies rely completely on outsourced manufacturing for production. The growth of this subindustry could provide an additional avenue of growth for contract manufacturers.

Massive Structural Changes in the Industry Are Likely to Occur Over the Short to Intermediate Term as Companies Strive to Build Critical Success Factors

We have identified several critical success factors for industry participants. In general, we believe that the CMO companies that will capitalize on this tremendous growth opportunity will be those that directly align their business model with the goals of their customer base: pharmaceutical, virtual pharmaceutical and biotech customers. In addition, we believe that the formation of long-term strategic relationships with pharmaceutical customers is becoming increasingly critical.

Customer Relationships at R&D/Drug Development Levels: Our research suggests that long-term strategic partnerships beginning at the R&D level during the early stages of the drug development process are key to success. We believe that those companies that are tied to products during the early stages of development are well-positioned to capture manufacturing contracts upon commercialization of new drug candidates.

Technology as a Key Differentiator: Our research suggests that those suppliers who have "multitechnology" capabilities are better positioned than others to win "supplier of choice" or favored-status position with potential customers.

Manufacturing Capability: We believe that offering a broad base of manufacturing technologies and available current Good Manufacturing Practices (cGMP) capacity for manufacture provides industry participants with a competitive advantage in winning new contracts.

Demonstrated "Soft" Capabilities: Due to the nature of the pharmaceutical industry, we believe the possession of several intangible qualities is extremely important to generating contract wins. In particular, we believe that flexibility, scalability, adaptability, reliability and quality are extremely important to the pharmaceutical/biotech customer base. The CMO's knowledge of and skill in meeting regulatory approvals are included in this area.

Strategic Customer Relationships: We believe that those CMOs that form strategic relationships with key pharmaceutical customers are well-positioned to generate additional new business from these customers. Our research indicates that pharmaceutical companies would ideally like to limit their number of suppliers to reduce complexity.

Critical Mass: We believe scale is required to support the broad range of capabilities necessary for success.

Today, our research suggests that *no* single company has achieved all of the critical success factors described previously. As a result, we believe major business consolidations and joint ventures will occur over the short to intermediate term as competitors build strengths in these key areas.

We believe the “winners” in this industry will be those companies that are the most aggressive acquirers of the critical success factors. We expect this industry to undergo extensive structural reconfiguration over the next three to five years as companies build capabilities in the areas outlined previously. We believe that the long-term winners in the industry will be those that build competitive strengths in the areas outlined previously the fastest. Due to the long-term nature of customer-supplier relationships in this area, we believe early establishment of a relationship with the customer is critical. The earlier a broad competence is achieved, the better positioned the supplier should be over the long term. As such, we believe early, aggressive consolidators in this industry will ultimately be best-positioned.

We believe several companies are best-positioned today to become “winners” over the next few years—Lonza, DSM, Catalytica, Cambrex and Sigma Aldrich Corp. (Nasdaq-SIAL-\$32 3/4) appear to be forming an early lead. We believe these companies are currently well-positioned to take advantage of the growth in contract manufacturing; however, this industry is still relatively young and dramatic changes in competitive positioning can occur overnight. In addition, several industry participants have vast financial resources from which to draw on and are aggressively building competence in this area. (e.g., Bayer, AlliedSignal Inc. [NYSE-ALD-\$65], Dow Chemical Co. [NYSE-DOW-\$114 5/16], Eastman Chemical Co. [NYSE-EMN-\$46 ½] and others). Furthermore, the structural changes in the industry that we expect to occur over the next several years will likely leave the industry completely reconfigured. For U.S.-based investors, we believe that the best way to “play” this growth is through owning Cambrex and Catalytica.

Recommend Investors Purchase Cambrex and Catalytica to Play in This Space

We believe that the best way to play the opportunity emerging in this area is to own Catalytica and Cambrex. As a result, we initiated coverage of Catalytica with a STRONG BUY Rating. We established earnings estimates for Catalytica of \$0.43, \$0.52 and \$0.65, for FY99, FY00, and FY01 for Catalytica, respectively. We also initiated coverage of Cambrex with a STRONG BUY rating and established earnings estimates of \$1.70, \$2.00 and \$2.30 for FY99, FY00 and FY01, respectively for Cambrex.