# FRX and IRWD

**Research Analysts**

**Catherine J. Arnold**
212 538 6225
catherine.j.arnold@credit-suisse.com

**Vamil Divan**
212 538 5394
vamil.divan@credit-suisse.com

**Ariyanto Jahja**
212 325 0767
ariyanto.jahja@credit-suisse.com

**INCREASE TARGET PRICE**

## First Phase III IBS-C Data Bodes Well for Linaclotide's Approvability, Although Commercial Challenges Keep Us Cautious on Drug's Potential

- **Impressive data in IBS-C confirms Street's optimism.** We expect FRX and IRWD shares to react positively to the release of positive data from their first Phase III study for linaclotide in irritable bowel syndrome with constipation (IBS-C). While the results are in-line with most investors' expectations, today's data reinforces the clinical profile for the product and suggests that the second IBS-C study may be positive as well. Given the strength of today's data, we raise our probability of success for the product coming to the market from 75% to 85%. Our IRWD target price is based on a probability-adjusted NPV and increases from $11 to $12 while our FRX target price is a 70/30 blend of DCF and relative valuation and increases from $28 to $29. Our relative conservatism on the product remains unchanged, due to the challenges the constipation market brings, and we maintain our Neutral rating on both names.
- **Expect positive results from remaining linaclotide studies.** The overall response rates and the persistence of the treatment effect on both abdominal pain and complete spontaneous bowel movements (CSBMs) in this 12-week study are encouraging (Exhibit 1 - Exhibit 4), as we await the top-line data in 4Q 2010 from study MCP-103-302, which had a 26-week treatment period. The minimal systemic absorption of the drug also leaves us confident in the data that will emerge from the ongoing long-term safety studies with the drug. All of these studies will need to come back positive before linaclotide can be approved for use in chronic constipation (CC) or IBS-C but data available to date suggests that the drug will be able to meet these upcoming hurdles.
- **Compliance issues and over-the-counter (OTC) competitors make success in constipation markets a challenge.** Despite the strength of the data for linaclotide in both CC and IBS-C, we remain relatively guarded on the drug's commercial potential given our previous due diligence into this market. Our 100-physician survey revealed how dominant OTC medications are in this market and suggested that, for patients who do receive prescription medications, 80% stop therapy for reasons other than symptom resolution and about half of them complete less than 60% of the prescription that they are given (Exhibit 5 - Exhibit 8). The size of the constipation markets and the overall clinical profile of linaclotide, however, still leaves us expecting US sales to surpass $1 Bn by 2020.

**Exhibit 1: Top-Line Efficacy Data from Phase III LIN-MD-31 Study (US Endpoints)**

| | Responder Rates (%) | | |
|---|---|---|---|
| Primary Endpoints | 266 mcg | Placebo | P-value |
| • Composite responder 1 (abdominal pain 30, CSBM 3+1, 9/12) | 12 | 5 | =0.0004 |
| • CSBM responder 1 (CSBM 3+1, 9/12) | 20 | 6 | <0.0001 |
| • Abdominal pain responder 1 (abdominal pain 30, 9/12) | 34 | 27 | =0.0262 |
| • Composite responder 2 (abdominal pain 30, CSBM +1, 6/12) | 34 | 21 | <0.0001 |
| Secondary Endpoints | | | |
| • CSBM+1 responder 2 (CSBM +1, 6/12) | 49 | 30 | <0.0001 |
| • Abdominal pain responder 2 (abdominal pain 30, 6/12) | 50 | 37 | =0.0003 |
| • Abdominal pain (12-week) | | Yes | <0.0001 |
| • Percent of abdominal pain-free days (12-week) | | Yes | =0.0014 |
| • Abdominal discomfort (12-week) | | Yes | <0.0001 |
| • Bloating (12-week) | | Yes | <0.0001 |
| • CSBM frequency rate (12-week) | | Yes | <0.0001 |
| • SBM frequency rate (12-week) | | Yes | <0.0001 |
| • Stool consistency (12-week) | | Yes | <0.0001 |
| • Severity of straining (12-week) | | Yes | <0.0001 |

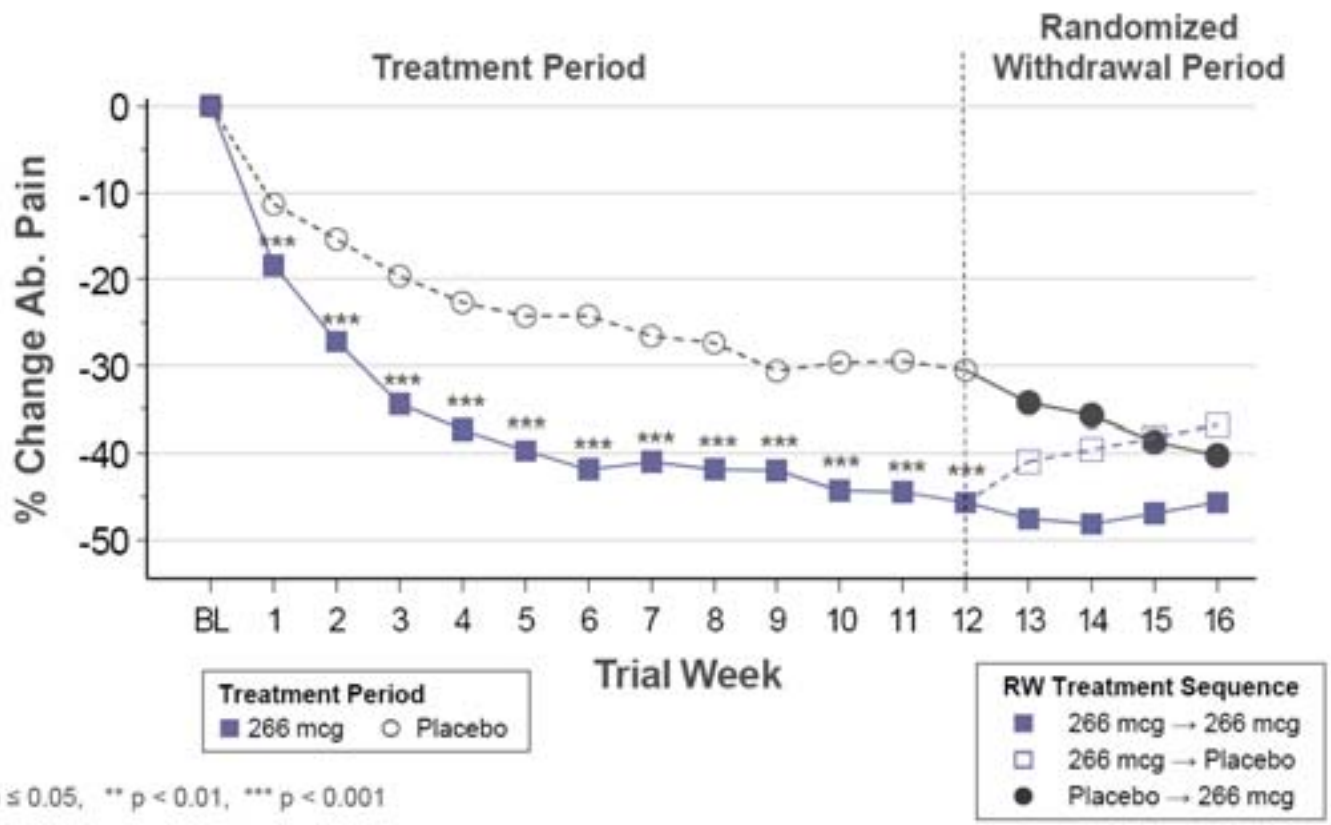
*Source: Company data.*

**Exhibit 2: Top-Line Efficacy Data from Phase III LIN-MD-31 Study (EU Endpoints)**

| | Responder Rates (%) | | Nominal |
|---|---|---|---|
| Co-Primary Endpoints | 266 mcg | Placebo | p-value |
| • 12-week abdominal pain / abdominal discomfort responder | 55 | 42 | =0.0002 |
| • 12-week IBS degree of relief responder | 37 | 18 | <0.0001 |
| Secondary Endpoints | | | |
| • Bloating (12-week) | | Yes | <0.0001 |
| • CSBM frequency rate (12-week) | | Yes | <0.0001 |
| • Stool consistency (12-week) | | Yes | <0.0001 |
| • Severity of straining (12-week) | | Yes | <0.0001 |

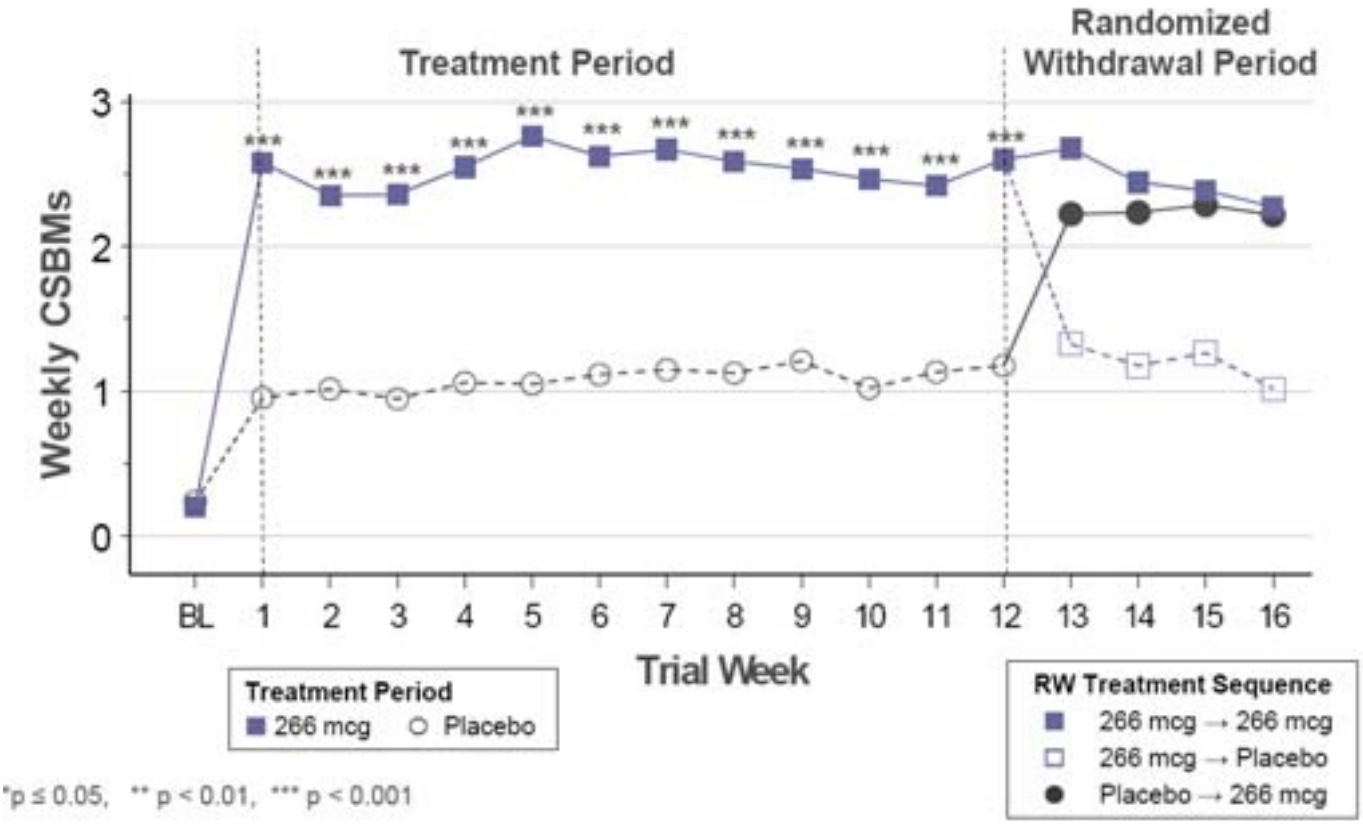
*Source: Company data.*

**Exhibit 3: Abdominal Pain Reduction through 16 Weeks in Phase III LIN-MD-31 Study**



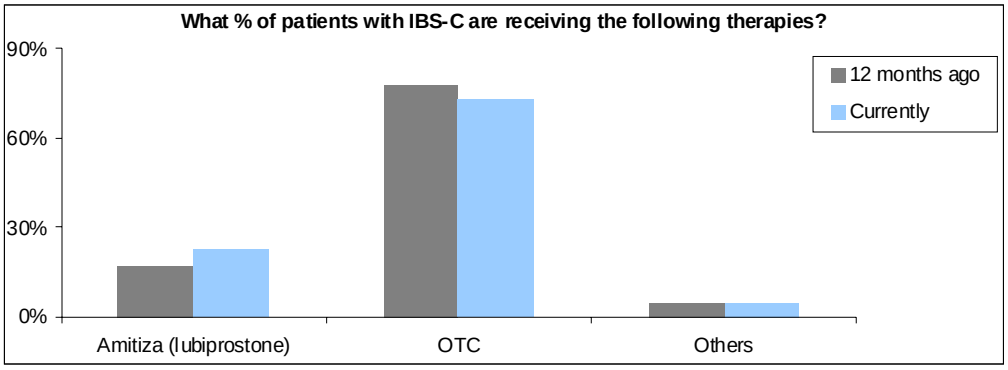

*Source: Company data.*

**Exhibit 4: Improvement in CSBMs through 16 Weeks in Phase III LIN-MD-31 Study**



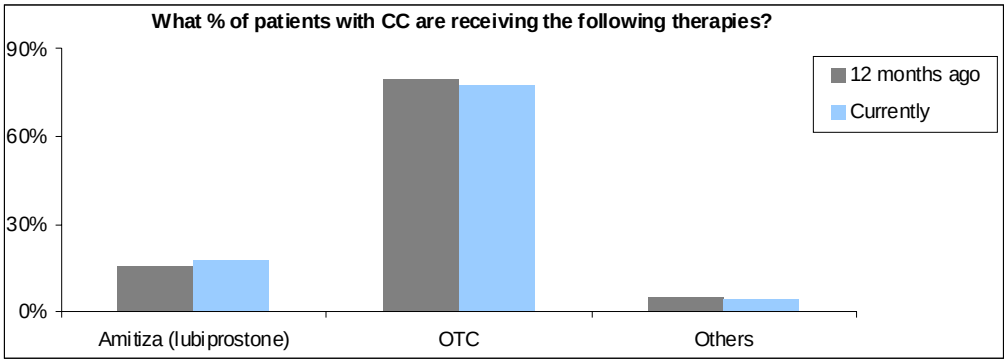

*Source: Company data.*

**Exhibit 5: CS Survey results highlights dominance of OTC meds in IBS-C market**



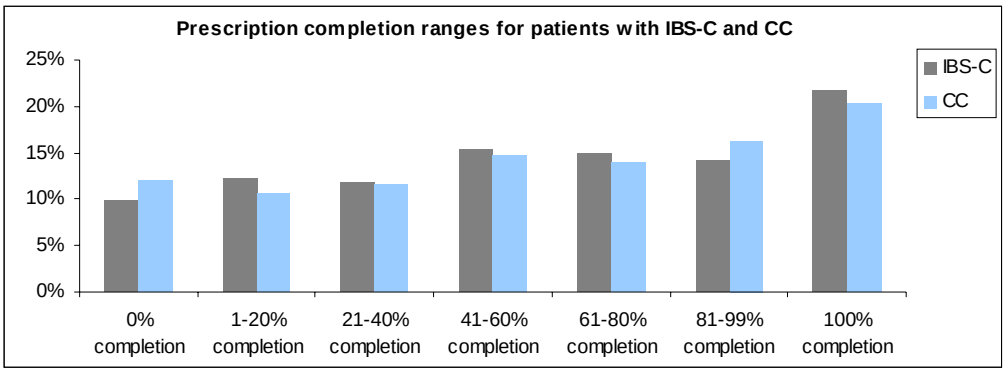

*Source: Credit Suisse proprietary survey.*

**Exhibit 6: OTC medications also dominate the CC market**



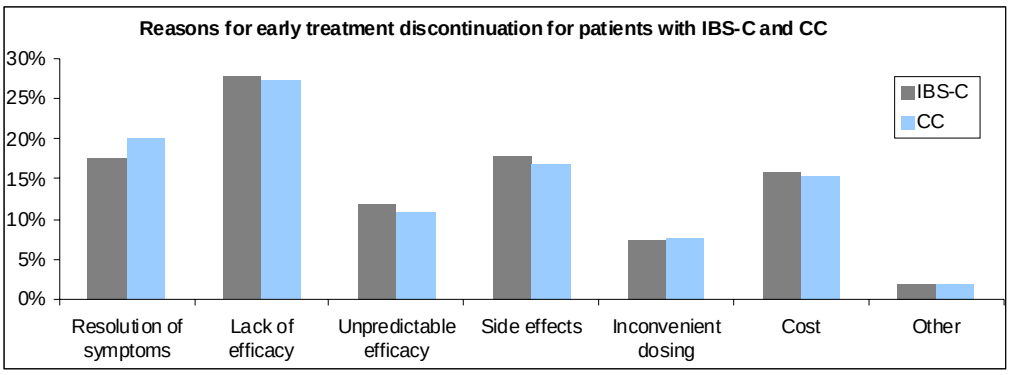

*Source: Credit Suisse proprietary survey.*

**Exhibit 7: Survey Respondents Believe that About Half of Their Patients with IBS-C and CC Complete Less than 60% of the Prescription That They Are Given for Their Illness**




*Source: Credit Suisse proprietary survey.*

**Exhibit 8: 80% of Patients Stop Therapy for IBS-C and CC for Reasons other Than Resolution of Their Symptoms**




*Source: Credit Suisse proprietary survey.*

| Company | Price ccy | Price 10 Sep 10 | Rating* Prev. | Rating* Cur. | Target Price Prev. | Target Price Cur. | Year End | EPS Ccy | EPS FY1E Prev. | EPS FY1E Cur. | EPS FY2E Prev. | EPS FY2E Cur. | EPS FY3E Prev. | EPS FY3E Cur. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Forest Laboratories Inc. (FRX) | US$ | 29.86 | — | N | 28.00 | 29.00 | Mar 10 | US$ | — | 3.73 | — | 4.11 | 1.33 | 1.30 |
| Ironwood Pharmaceuticals (IRWD) | US$ | 9.74 | — | N [V] | 11.00 | 12.00 | Dec 09 | US$ | — | (0.66) | — | (0.56) | — | (0.04) |

**O – Outperform, N – Neutral, U – Underperform, R – Restricted* *[V] = Stock considered volatile (see Disclosure Appendix).*
*Source: Company data, Credit Suisse estimates.*

**Companies Mentioned** *(Price as of 13 Sep 10)*
Forest Laboratories Inc. (FRX, $29.86, NEUTRAL, TP $29.00)
Ironwood Pharmaceuticals (IRWD, $9.74, NEUTRAL [V], TP $12.00)

# Disclosure Appendix

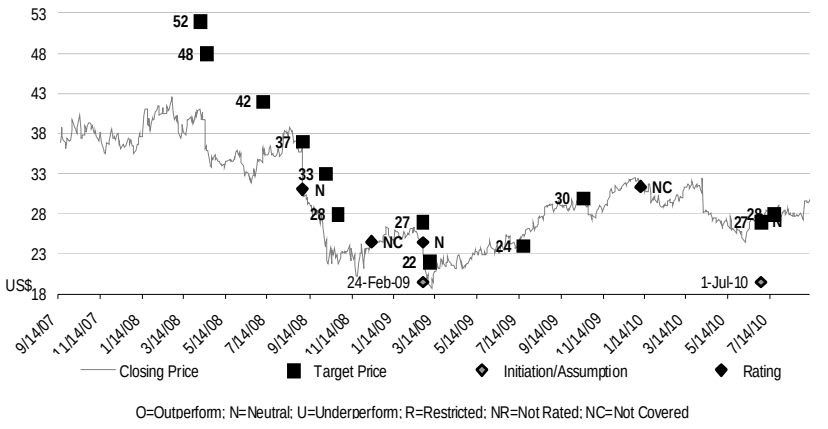
## Important Global Disclosures

I, Vamil Divan, certify that (1) the views expressed in this report accurately reflect my personal views about all of the subject companies and securities and (2) no part of my compensation was, is or will be directly or indirectly related to the specific recommendations or views expressed in this report.

*See the Companies Mentioned section for full company names.*

### 3-Year Price, Target Price and Rating Change History Chart for FRX

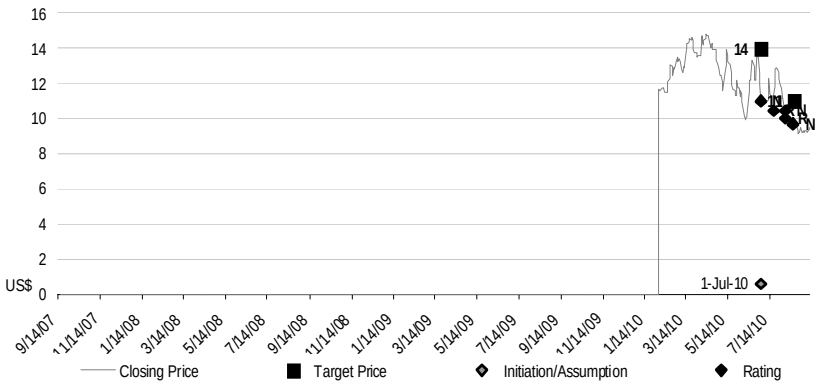
| FRX Date | Closing Price (US$) | Target Price (US$) | Rating | Initiation/ Assumption |
|---|---|---|---|---|
| 4/7/08 | 41.13 | 52 | | |
| 4/16/08 | 36.52 | 48 | | |
| 7/8/08 | 36.11 | 42 | | |
| 9/3/08 | 31.08 | 37 | N | |
| 10/7/08 | 24.26 | 33 | | |
| 10/24/08 | 21.86 | 28 | | |
| 12/12/08 | 24.54 | | NC | |
| 2/24/09 | 24.43 | 27 | N | X |
| 3/6/09 | 19.12 | 22 | | |
| 7/20/09 | 25.4 | 24 | | |
| 10/15/09 | 30.18 | 30 | | |
| 1/7/10 | 31.37 | | NC | |
| 7/1/10 | 27.17 | 27 | N | X |
| 7/20/10 | 28.1 | 28 | | |




O=Outperform; N=Neutral; U=Underperform; R=Restricted; NR=Not Rated; NC=Not Covered

### 3-Year Price, Target Price and Rating Change History Chart for IRWD

| IRWD Date | Closing Price (US$) | Target Price (US$) | Rating | Initiation/ Assumption |
|---|---|---|---|---|
| 7/1/10 | 11 | 14 | N | X |
| 7/19/10 | 10.47 | | R | |
| 8/5/10 | 10.45 | | N | |
| 8/6/10 | 10 | | R | |
| 8/17/10 | 9.7 | | N | |
| 8/19/10 | 9.58 | 11 | | |




O=Outperform; N=Neutral; U=Underperform; R=Restricted; NR=Not Rated; NC=Not Covered

The analyst(s) responsible for preparing this research report received compensation that is based upon various factors including Credit Suisse's total revenues, a portion of which are generated by Credit Suisse's investment banking activities.

## Analysts' stock ratings are defined as follows:

**Outperform (O):** The stock's total return is expected to outperform the relevant benchmark* by at least 10-15% (or more, depending on perceived risk) over the next 12 months.
**Neutral (N):** The stock's total return is expected to be in line with the relevant benchmark* (range of ±10-15%) over the next 12 months.

**Underperform (U):** The stock's total return is expected to underperform the relevant benchmark* by 10-15% or more over the next 12 months.
**Relevant benchmark by region: As of 29th May 2009, Australia, New Zealand, U.S. and Canadian ratings are based on (1) a stock's absolute total return potential to its current share price and (2) the relative attractiveness of a stock's total return potential within an analyst's coverage universe**, with Outperforms representing the most attractive, Neutrals the less attractive, and Underperforms the least attractive investment opportunities. Some U.S. and Canadian ratings may fall outside the absolute total return ranges defined above, depending on market conditions and industry factors. For Latin American, Japanese, and non-Japan Asia stocks, ratings are based on a stock's total return relative to the average total return of the relevant country or regional benchmark; for European stocks, ratings are based on a stock's total return relative to the analyst's coverage universe**. For Australian and New Zealand stocks a 22% and a 12% threshold replace the 10-15% level in the Outperform and Underperform stock rating definitions, respectively, subject to analysts' perceived risk. The 22% and 12% thresholds replace the +10-15% and -10-15% levels in the Neutral stock rating definition, respectively, subject to analysts' perceived risk.*
***An analyst's coverage universe consists of all companies covered by the analyst within the relevant sector.*
**Restricted (R):** In certain circumstances, Credit Suisse policy and/or applicable law and regulations preclude certain types of communications, including an investment recommendation, during the course of Credit Suisse's engagement in an investment banking transaction and in certain other circumstances.

**Volatility Indicator [V]:** A stock is defined as volatile if the stock price has moved up or down by 20% or more in a month in at least 8 of the past 24 months or the analyst expects significant volatility going forward.

**Analysts' coverage universe weightings are distinct from analysts' stock ratings and are based on the expected performance of an analyst's coverage universe* versus the relevant broad market benchmark**:**
**Overweight:** Industry expected to outperform the relevant broad market benchmark over the next 12 months.
**Market Weight:** Industry expected to perform in-line with the relevant broad market benchmark over the next 12 months.
**Underweight:** Industry expected to underperform the relevant broad market benchmark over the next 12 months.
**An analyst's coverage universe consists of all companies covered by the analyst within the relevant sector.*
***The broad market benchmark is based on the expected return of the local market index (e.g., the S&P 500 in the U.S.) over the next 12 months.*

**Credit Suisse's distribution of stock ratings (and banking clients) is:**

| | Global Ratings Distribution | |
|---|---|---|
| **Outperform/Buy*** | 46% | (61% banking clients) |
| **Neutral/Hold*** | 40% | (59% banking clients) |
| **Underperform/Sell*** | 12% | (51% banking clients) |
| **Restricted** | 2% | |

**For purposes of the NYSE and NASD ratings distribution disclosure requirements, our stock ratings of Outperform, Neutral, and Underperform most closely correspond to Buy, Hold, and Sell, respectively; however, the meanings are not the same, as our stock ratings are determined on a relative basis. (Please refer to definitions above.) An investor's decision to buy or sell a security should be based on investment objectives, current holdings, and other individual factors.*

Credit Suisse's policy is to update research reports as it deems appropriate, based on developments with the subject company, the sector or the market that may have a material impact on the research views or opinions stated herein.

Credit Suisse's policy is only to publish investment research that is impartial, independent, clear, fair and not misleading. For more detail please refer to Credit Suisse's Policies for Managing Conflicts of Interest in connection with Investment Research: http://www.csfb.com/research-and-analytics/disclaimer/managing_conflicts_disclaimer.html

Credit Suisse does not provide any tax advice. Any statement herein regarding any US federal tax is not intended or written to be used, and cannot be used, by any taxpayer for the purposes of avoiding any penalties.

*See the Companies Mentioned section for full company names.*
**Price Target:** (12 months) for (FRX)
**Method:** Our $29 target price for Forest is based on a 70/30% blend of (DCF) valuation of $31 and relative valuation of $25. Our DCF uses a 11.0% WACC (weighted average cost of capital) and a terminal EBITDA multiple of 4.0x. For our P/E valuation, we place FRX at a 10% premium to its Speciality Pharma peers, giving it a multiple of 11.6x applied to its FY 2014 EPS estimate of $2.07.
**Risks:** Risks to our $29 target price for Forest include: (1) development pipeline risks, (2) unexpected declines in key products sales growth, and (3) earlier than expected generic entry for key products.
**Price Target:** (12 months) for (IRWD)
**Method:** Our $12 target price for IRWD is based on a probability weighted net present value (NPV) analysis. We have used a 15% WACC (weighted average cost of capital) for our analysis. Major sources of cash inflow for Ironwood include: (1) Future US linaclotide profit share income, (2) linaclotide ex-US royalty income, and (3) milestones-based revenues.
**Risks:** Risk to our $12 target price include: (1) Regulatory risks related to linaclotide approval, (2) single product risk, (3) unexpected change in competitive landscape, and (4) the company's financing risk, due to the potential need to raise additional funds to fund spend related to linaclotide launch.

Please refer to the firm's disclosure website at www.credit-suisse.com/researchdisclosures for the definitions of abbreviations typically used in the target price method and risk sections.

*See the Companies Mentioned section for full company names.*
The subject company (FRX, IRWD) currently is, or was during the 12-month period preceding the date of distribution of this report, a client of Credit Suisse.

Credit Suisse provided investment banking services to the subject company (FRX, IRWD) within the past 12 months.
Credit Suisse has managed or co-managed a public offering of securities for the subject company (IRWD) within the past 12 months.
Credit Suisse has received investment banking related compensation from the subject company (IRWD) within the past 12 months.
Credit Suisse expects to receive or intends to seek investment banking related compensation from the subject company (FRX, IRWD) within the next 3 months.
As of the date of this report, Credit Suisse Securities (USA) LLC makes a market in the securities of the subject company (IRWD).

## Important Regional Disclosures

Singapore recipients should contact a Singapore financial adviser for any matters arising from this research report.

The analyst(s) involved in the preparation of this report have not visited the material operations of the subject company (FRX, IRWD) within the past 12 months.

Restrictions on certain Canadian securities are indicated by the following abbreviations: NVS--Non-Voting shares; RVS--Restricted Voting Shares; SVS--Subordinate Voting Shares.
Individuals receiving this report from a Canadian investment dealer that is not affiliated with Credit Suisse should be advised that this report may not contain regulatory disclosures the non-affiliated Canadian investment dealer would be required to make if this were its own report.
For Credit Suisse Securities (Canada), Inc.'s policies and procedures regarding the dissemination of equity research, please visit http://www.csfb.com/legal_terms/canada_research_policy.shtml.

As of the date of this report, Credit Suisse acts as a market maker or liquidity provider in the equities securities that are the subject of this report.

Principal is not guaranteed in the case of equities because equity prices are variable.

Commission is the commission rate or the amount agreed with a customer when setting up an account or at anytime after that.

CS may have issued a Trade Alert regarding this security. Trade Alerts are short term trading opportunities identified by an analyst on the basis of market events and catalysts, while stock ratings reflect an analyst's investment recommendations based on expected total return over a 12-month period relative to the relevant coverage universe. Because Trade Alerts and stock ratings reflect different assumptions and analytical methods, Trade Alerts may differ directionally from the analyst's stock rating.
The author(s) of this report maintains a CS Model Portfolio that he/she regularly adjusts. The security or securities discussed in this report may be a component of the CS Model Portfolio and subject to such adjustments (which, given the composition of the CS Model Portfolio as a whole, may differ from the recommendation in this report, as well as opportunities or strategies identified in Trading Alerts concerning the same security). The CS Model Portfolio and important disclosures about it are available at www.credit-suisse.com/ti.

To the extent this is a report authored in whole or in part by a non-U.S. analyst and is made available in the U.S., the following are important disclosures regarding any non-U.S. analyst contributors:
The non-U.S. research analysts listed below (if any) are not registered/qualified as research analysts with FINRA. The non-U.S. research analysts listed below may not be associated persons of CSSU and therefore may not be subject to the NASD Rule 2711 and NYSE Rule 472 restrictions on communications with a subject company, public appearances and trading securities held by a research analyst account.

For Credit Suisse disclosure information on other companies mentioned in this report, please visit the website at www.credit-suisse.com/researchdisclosures or call +1 (877) 291-2683.
Disclaimers continue on next page.

**CREDIT SUISSE SECURITIES (USA) LLC**
United States of America: +1 (212) 325-2000