

# Pan-European Pharmaceuticals

## Feedback from FY24 catalysts doc series: semaglutide (cardio, renal, and hepatology)

Industry Overview

### Feedback from KOL call on semaglutide

We provide feedback from our call to discuss semaglutide across cardiology, nephrology, and hepatology (see overleaf for Venn diagram of these comorbidities) hosted as part of our [FY24 pipeline doc call series](#).

### Cardiologist: SELECT impress. Preserved most unmet need

At a high level cardiology expert impressed with consistent benefit across secondary endpoints. Specifically on HF endpoints focus on breakdown of patient population at baseline across reduced / preserved ejection fraction (though expert expects most to be preserved as more common in those suffering with overweight). Preserved greater unmet need, focus on whether GLP1 improves in that cohort (framed a 20% reduction would be seen as 'great'). On mediation analysis framed as more of an art than a science, so shouldn't be relied upon, with expert believing likely 2/3 of benefit from weight. However, did point to early separation of curves on benefit being mediated through mechanisms outside of weight loss alone. IN PAD, generally viewed softer endpoints in STRIDE on walking distance as meaningful given current paucity of meds to improve it, and believes GLP1 impacts on MI point to benefit on atherosclerosis with associated benefit on limb events and PAD symptoms therein.

### Nephrology: FLOW 20-25% ben possible. Discuss SELECT

Expert excited to see detailed FLOW data (reminding early stop on efficacy, which expert said surprised renal community). On this, expects benefit to be north of 20%, and possibly closer to 25%. Noting composite primary endpoint across multiple kidney factors, expert believed CV component clearly significant, with doubling of creatinine trending in the right direction, and albuminuria reduction (secondary endpoint) dramatically reduced, estimated at least 40-50%. On the latter, clarified its importance with ADA guidelines now guiding to needing >30% reduction in albuminuria that is sustained to get compliance with slowing of kidney disease. On SELECT secondary endpoint on progression to dialysis, expert would expect benefit here, but not likely to be seen in short/midterm vs benefit accruing over 2-3 years.

### Hepatology: ESSENCE to show NASH ben, but fibrosis a Q

General expert excitement on semaglutide. Expectation for PIII ESSENCE (in F2 and F3) to show NASH benefits, though more cautious on fibrosis endpoint noting a number of F2 patients enrolled to help powering, but who in turn are less likely to show benefit on fibrosis endpoint as lower staged disease. Outside of GLP1 noted excitement on retradutide (GGG) on a) high weight loss efficacy, and it as a correlate to liver improvements b) addition of glucagon over tirzepatide dual agonist seeming to help tolerability on GI in liver patients.

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## Outlining Venn diagram of overlaps in each comorbidity

We outline overlap between T2DM and obesity (approved indications for sema) and line extension indications as follows: 1) c70-80% of HFpEF comorbid with obesity; 2) c40% of T2DM comorbid with CKD; 3) c30-35% of PAD also indicated with T2DM; 4) NASH with c25% of population having NAFLD, 40% of NAFLD patients diabetic/obese, and separately c80-90% of diabetic/obese patients have NAFLD.

### Stocks mentioned

Prices and ratings for stocks mentioned in this report

| BofA Ticker | Bloomberg ticker | Company name | Price       | Rating |
|-------------|------------------|--------------|-------------|--------|
| NONOF       | NOVOB DC         | Novo Nordisk | DKr 723.9   | B-1-7  |
| NVO         | NVO US           | Novo Nordisk | US\$ 105.21 | B-1-7  |

Source: BofA Global Research

## Glossary

GLP1 = Glucagon like peptide 1

KOL = Key opinion leader

PI/II/III/IV = Phase 1/2/3/4

PAD = Peripheral arterial disease

MI = Myocardial infarction

CV = cardiovascular

NASH – Non-alcoholic steatohepatitis

GI = Gastrointestinal

## Price objective basis & risk

### Novo Nordisk (NONOF / NVO)

Our PO of DKK875/US\$125.2 assumes shares trade at c30x 2025E PE, above its prior absolute trading range given solid sales 25-28E CAGR (c11% versus sector c6%), increased confidence in growth from very positive outcomes data, and potential mid-term upside from strong obesity and continued strong GLP1 trends in diabetes

Our target sector multiple of c16x 25E PE is based on: 1) A 40% premium to the market average multiple which implies c15x 25E PE, a premium which is in line with the long-term historical trend for periods of growth for the sector during times of broader market uncertainty, 2) Regression analysis of historical sector forward PEs and three-year-forward EPS CAGR implies a target PE of c16x 25E PE based on sector growth of c7%, 3) Our DCF valuations imply c17x 25E PE

Upside risks to our PO are pipeline success, better-than-expected pipeline data/approvals, and better-than-expected launches of key products.

Downside risks to our PO are Wegovy & Rybelsus trajectory, China VBP insulin, risk of litigation, adverse currency moves, tirzepatide (Mounjaro) competition, and product concentration.

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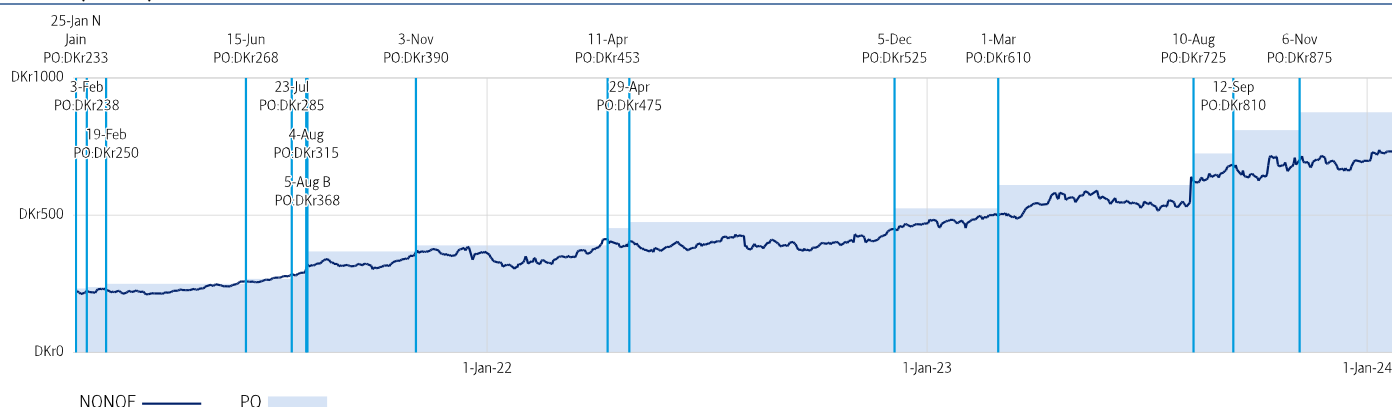
## EMEA - Pharma &amp; Biotech Coverage Cluster

| Investment rating   | Company          | BofA Ticker | Bloomberg symbol | Analyst          |
|---------------------|------------------|-------------|------------------|------------------|
| <b>BUY</b>          |                  |             |                  |                  |
|                     | AstraZeneca      | AZN         | AZN US           | Sachin Jain, CFA |
|                     | AstraZeneca      | AZNCF       | AZN LN           | Sachin Jain, CFA |
|                     | Genmab           | GNMSF       | GMAB DC          | Sachin Jain, CFA |
|                     | Genmab           | GMAB        | GMAB US          | Sachin Jain, CFA |
|                     | Grifols S.A.     | GIFLF       | GRF SM           | Graham Parry     |
|                     | Grifols S.A. - B | GRFS        | GRFS US          | Graham Parry     |
|                     | Grifols S.A. - B | GIFO        | GRF/P SM         | Graham Parry     |
|                     | Lonza AG         | LZAGF       | LONN SW          | Charlie Haywood  |
|                     | Lonza AG         | LZAGY       | LZAGY US         | Charlie Haywood  |
|                     | Merck KGaA       | MKGAF       | MRK GY           | Sachin Jain, CFA |
|                     | Merck KGaA       | MKKGY       | MKKGY US         | Sachin Jain, CFA |
|                     | Novartis         | NVSEF       | NOVN SW          | Graham Parry     |
|                     | Novartis         | NVS         | NVS US           | Graham Parry     |
|                     | Novo Nordisk     | NONOF       | NOVOB DC         | Sachin Jain, CFA |
|                     | Novo Nordisk     | NVO         | NVO US           | Sachin Jain, CFA |
|                     | Sandoz Group AG  | SDZXF       | SDZ SW           | Graham Parry     |
|                     | Sandoz Group AG  | SDZNY       | SDZNY US         | Graham Parry     |
|                     | Sanofi           | SNYNF       | SAN FP           | Graham Parry     |
|                     | Sanofi           | SNY         | SNY US           | Graham Parry     |
|                     | Sartorius AG     | SUVPF       | SRT3 GY          | Charlie Haywood  |
| <b>NEUTRAL</b>      |                  |             |                  |                  |
|                     | Bayer            | BAYZF       | BAYN GY          | Sachin Jain, CFA |
|                     | Bayer            | BAYRY       | BAYRY US         | Sachin Jain, CFA |
|                     | H. Lundbeck A/S  | HLUKF       | HLUNB DC         | Sachin Jain, CFA |
|                     | Idorsia          | IDRSF       | IDIA SW          | Sachin Jain, CFA |
|                     | Ipсен            | IPSEF       | IPN FP           | Sachin Jain, CFA |
|                     | Roche Holdings   | RHHBF       | ROG SW           | Sachin Jain, CFA |
|                     | Roche Holdings   | RHHBY       | RHHBY US         | Sachin Jain, CFA |
| <b>UNDERPERFORM</b> |                  |             |                  |                  |
|                     | GSK Plc          | GSK         | GSK US           | Graham Parry     |
|                     | GSK Plc          | GLAXF       | GSK LN           | Graham Parry     |
|                     | Orion            | ORINF       | ORNBV FH         | Graham Parry     |
|                     | UCB              | UCBJF       | UCB BB           | Graham Parry     |
|                     | UCB              | UCBJY       | UCBJY US         | Graham Parry     |

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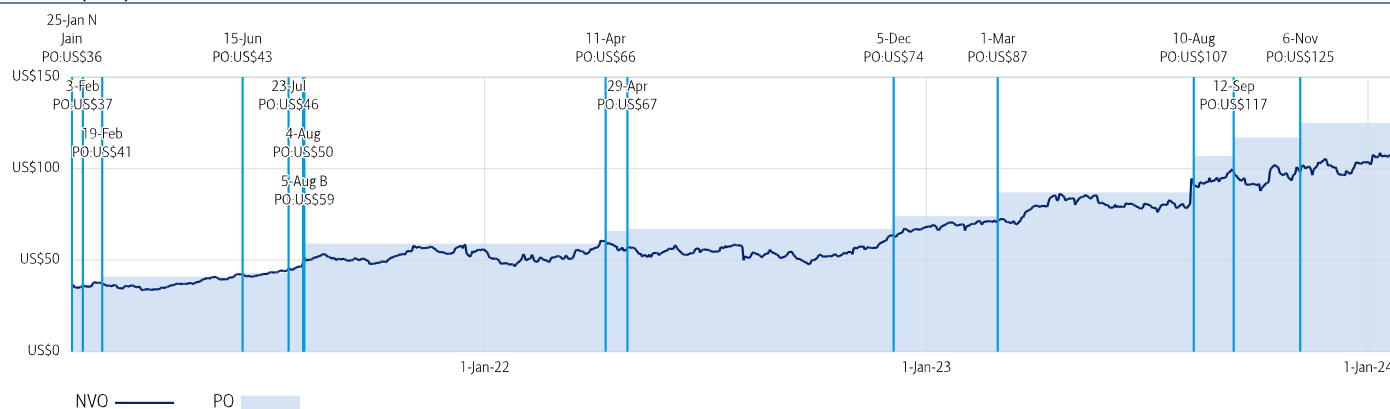
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## Novo Nordisk (NONOF) Price Chart



B: Buy, N: Neutral, U: Underperform, PO: Price Objective, NA: No longer valid, NR: No Rating

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**Novo Nordisk (NVO) Price Chart**

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| Coverage Universe | Count | Percent | Inv. Banking Relationships <sup>R1</sup> | Count | Percent |
|-------------------|-------|---------|--|-------|---------|
| Buy               | 234   | 60.94%  | Buy                                      | 115   | 49.15%  |
| Hold              | 80    | 20.83%  | Hold                                     | 36    | 45.00%  |
| Sell              | 70    | 18.23%  | Sell                                     | 29    | 41.43%  |

**Equity Investment Rating Distribution: Global Group (as of 31 Dec 2023)**

| Coverage Universe | Count | Percent | Inv. Banking Relationships <sup>R1</sup> | Count | Percent |
|-------------------|-------|---------|--|-------|---------|
| Buy               | 1895  | 53.62%  | Buy                                      | 1083  | 57.15%  |
| Hold              | 832   | 23.54%  | Hold                                     | 454   | 54.57%  |
| Sell              | 807   | 22.84%  | Sell                                     | 383   | 47.46%  |

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| Investment rating | Total return expectation (within 12-month period of date of initial rating) | Ratings dispersion guidelines for coverage cluster <sup>R2</sup> |
|-------------------|---|--|
| Buy               | ≥ 10%   | ≤ 70%  |
| Neutral           | ≥ 0%  | ≤ 30%  |
| Underperform      | N/A   | ≥ 20%  |

<sup>R2</sup> Ratings dispersions may vary from time to time where BofA Global Research believes it better reflects the investment prospects of stocks in a Coverage Cluster.

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