Investor Presentation

Sept 2021

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SHIELD THERAPEUTICS PLC

Overview of Shield Therapeutics:

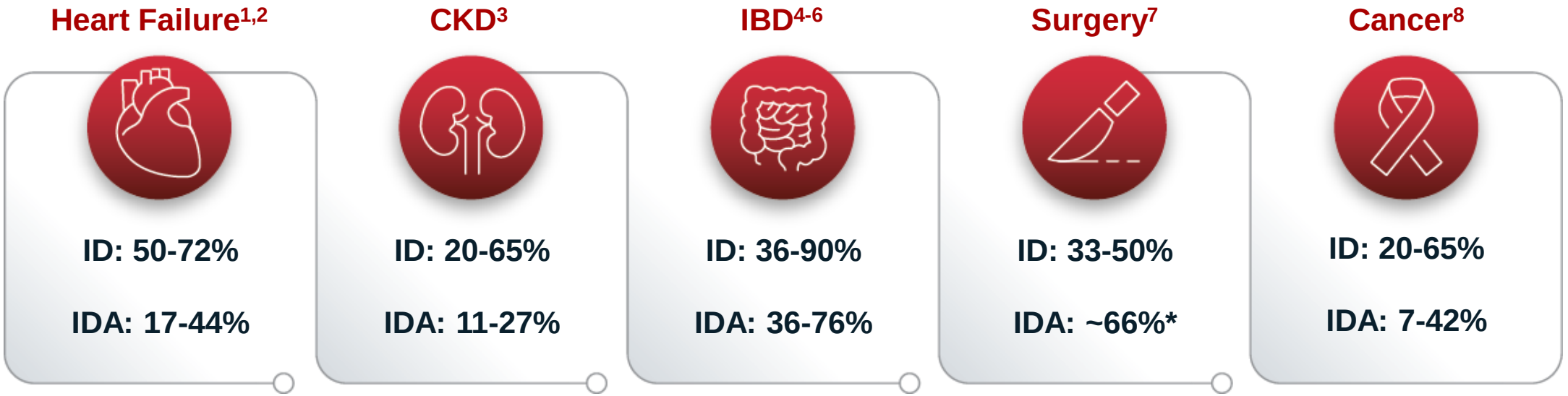
Pharmaceutical Company Focused on the Treatment of Iron Deficiency

- **London AIM-listed company (STX.L; OTCQX:SHIEF)**
  - Market capitalization ~GBP 110m / USD 150m

- **Primary focus is on developing and commercializing Accrufer®/Feraccru®**
  - A novel oral treatment approved in US and EU for treating iron deficiency (ID) in adults
  - US commercialization commenced Q3 2021 following equity raise of GBP 28m / USD 39m (net of fees) March 2021
  - Ex-US Commercialization out-licensed to:
    - Norgine (Q4 2018) – Europe, Australia and New Zealand
    - ASK Pharma (Q1 2020) – China, Taiwan, Hong Kong and Macau
    - Korea Pharma (Q3 2021) – Republic of Korea
  - Patent protection until 2035

Market and Opportunity

ID and IDA Prevalence are High in Patients with Many Inflammatory Conditions or Women's Health



- ~20% of women of childbearing age and up to 37% of pregnant women may have IDA[9,10]
- However, prevalence estimates can differ due to the disease stage and severity of the patient population being studied[7]

*IDA secondary to major surgery.

ID, iron deficiency; IDA, iron deficiency anemia; CKD, chronic kidney disease; IBD, inflammatory bowel disease.

1. Klip IT, et al. *Am Heart J*. 2013;165(4):575-582.e573**. 2.** Cohen-Solal A, et al. *Eur J Heart Fail.* 2014;16(9):984-991**. 3.** Fishbane S, et al. *Clin J Amer Soc Neph*. 2009;4(1):57. **4.** Bager P, et al. *Scand J Gastro*. 2010;46:304-309. **5.** Kulnigg S, et al. *Aliment Pharm & Ther*. 2006;24(11-12):1507-1523. **6.** Stein J, et al. *Nat Rev Gastroenterol Hepatol*. 2010;7(11):599-610. **7.** Cappellini MD, et al. *J Intern Med.* 2020;287(2):153-170. **8.** Naoum FA. *Rev Bras Hematol Hemoter*. 2016;38(4):325-330. **9.** Your Guide to Anemia. National Heart, Lung, and Blood Institute website. https://www.nhlbi.nih.gov/files/docs/public/blood/anemia-yg.pdf. September, 2011. **10.** Friedman AJ, et al. *J Womens Health (Larchmt)*. 2012;21(12):1282-1289.

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Treatment of IDA

- The underlying cause of IDA should be investigated, or the patient referred to a specialist[1,2]
- Prompt treatment of IDA is warranted, as correction improves QoL, physical conditioning, fatigue, and cognitive deficits[3]
- An important question in IDA management is whether or when oral or IV iron should be used[1,3]

Usually, 1st line	Less efficient absorption
Convenient	Poor tolerability
Readily available	Slower iron repletion
	Exacerbation of IBD
	Poor compliance often due to AEs
	Risk of iron overload due to overdose

Usually, 2nd line after oral iron failure	Inconvenient
Fast iron repletion	Infusion required
Better bioavailability and absorption	Risk of anaphylaxis
No compliance issues	Risk of iron overload due to overdose

IDA, iron deficiency anemia; QoL, quality of life; GI gastrointestinal; IBD, inflammatory bowel disease; AEs, adverse events.

1. Cappellini MD, et al. *J Intern Med.* 2020;287(2):153-170. **2.** Short MW, et al. *Am Fam Physician.* 2013;87(2):98-104. **3.** Jimenez K, et al. *Gastroenterol Hepatol (N Y).* 2015;11(4):241-250.

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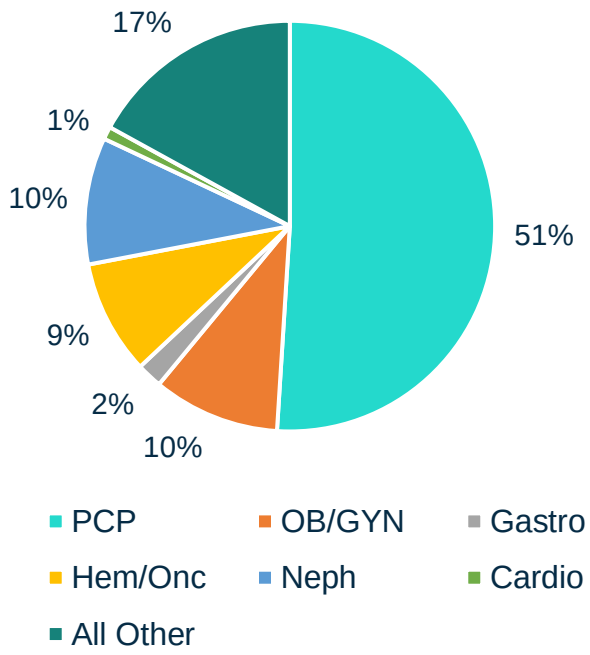
US Iron Replacement Market is Large with Oral Therapies making up 90% of the Volume and PCPs Writing 50% of the Rx

- ~10 million Rx's per year for oral iron
  - OTC and Generics
- ~550K clinicians writing for oral and/or IV iron yearly
  - PCP's and OB/GYN make up over >60% of the volume
- 65,000 physicians drive >60% or oral iron volume
  - PCP's, OB/GYN majority of volume

Total Market TRx Volume by Specialty



Note: All specialty groups include any associated NPPAs i.e. OBGYN specialty group includes board certified OBGYNs and any mid-levels that practice with them.
PCPs here include Family Practice, General Practice, and Internal Medicine specialties, and their associated NPPAs
Source: Medical Claims and Xponent data, 12 month time period ending Dec 2019

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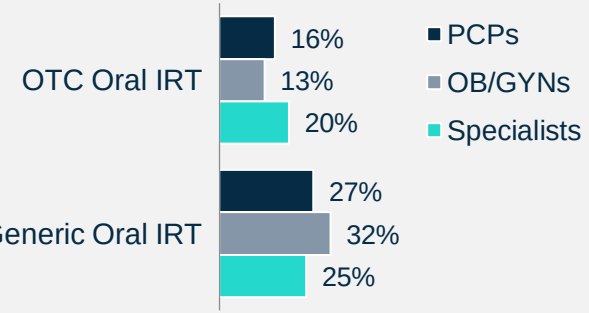
Clinicians are Seeking a Well-Tolerated and Effective Oral Iron

Satisfaction

✓ Current satisfaction with oral IRT (OTC and prescription) is low.



Importance

Most Important Attributes in IRT Selection

% rating 6,7 (Top 2 Box)	PCPs	OB/GYNs	Specialists
Well-tolerated	86%	94%	75%
Effective therapy	82%	94%	85%
Acceptable OOP cost to patients	82%	77%	60%
Good safety profile	80%	84%	70%
Convenient dosing and administration	76%	77%	80%

Shield ATU Research, June 2021, n=102

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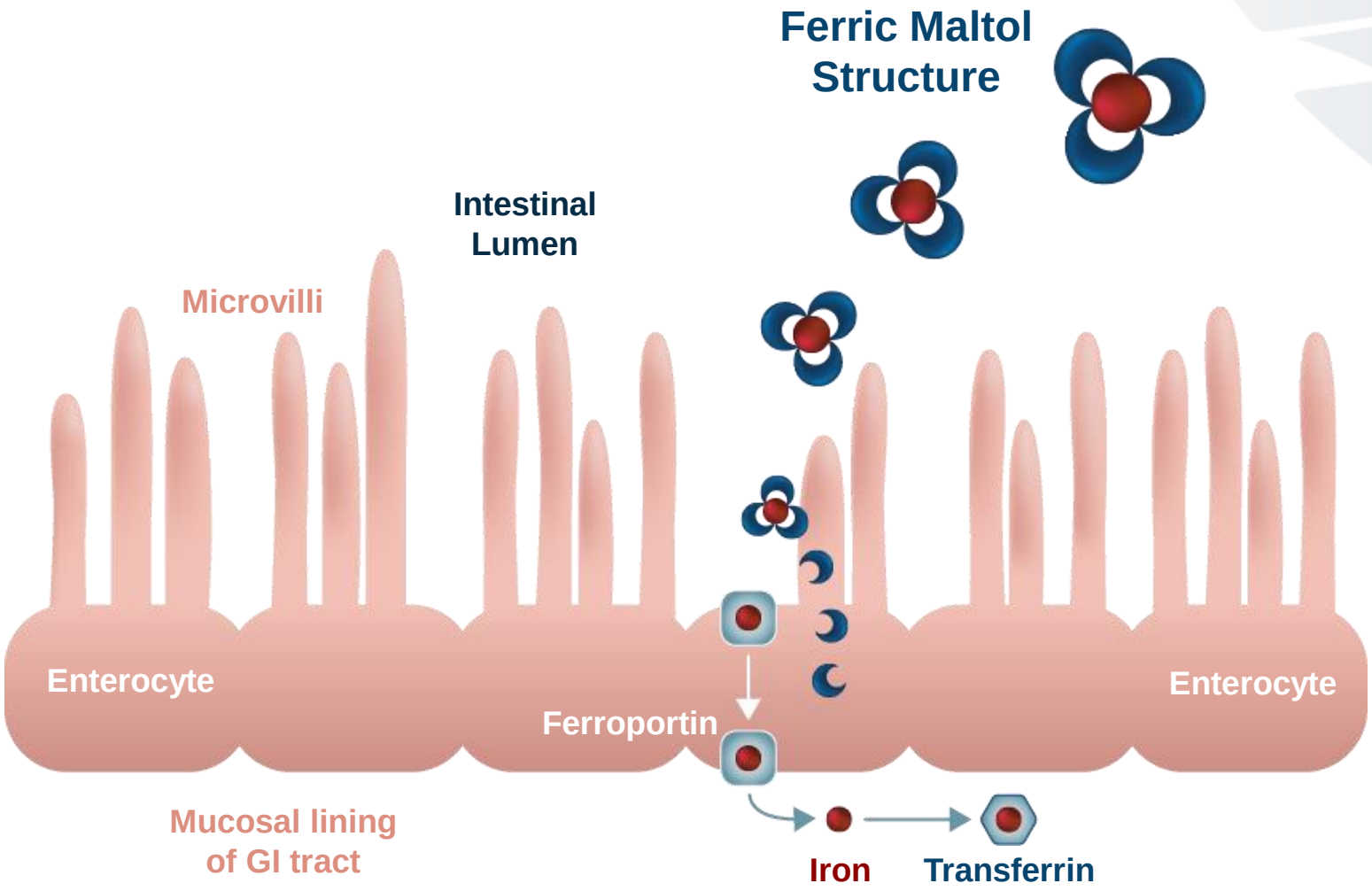
Accrufer® - A Unique Formulation of Oral Iron

- The Fe^{3+} in Accrufer remains in complex with maltol until absorbed and iron is delivered into the bloodstream, where it binds to transferrin[1]
- Other oral irons are salts and require iron dissociation for absorption, leading to formation of reactive oxygen species (ROS).
  - This causes intolerance in many patients and is the main reason for discontinuation.



1. ACCRUFER (ferric maltol) [Prescribing Information]. Austin, TX: Shield Therapeutics, 2019. **2.** Gasche C, et al. *Inflamm Bowel Dis.* 2015;21(3):579-588.

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Accrufer® Increased and Maintained Hb Concentrations Over 64 Weeks

- The long-term efficacy of Accrufer® was investigated in a 52-week study extension phase

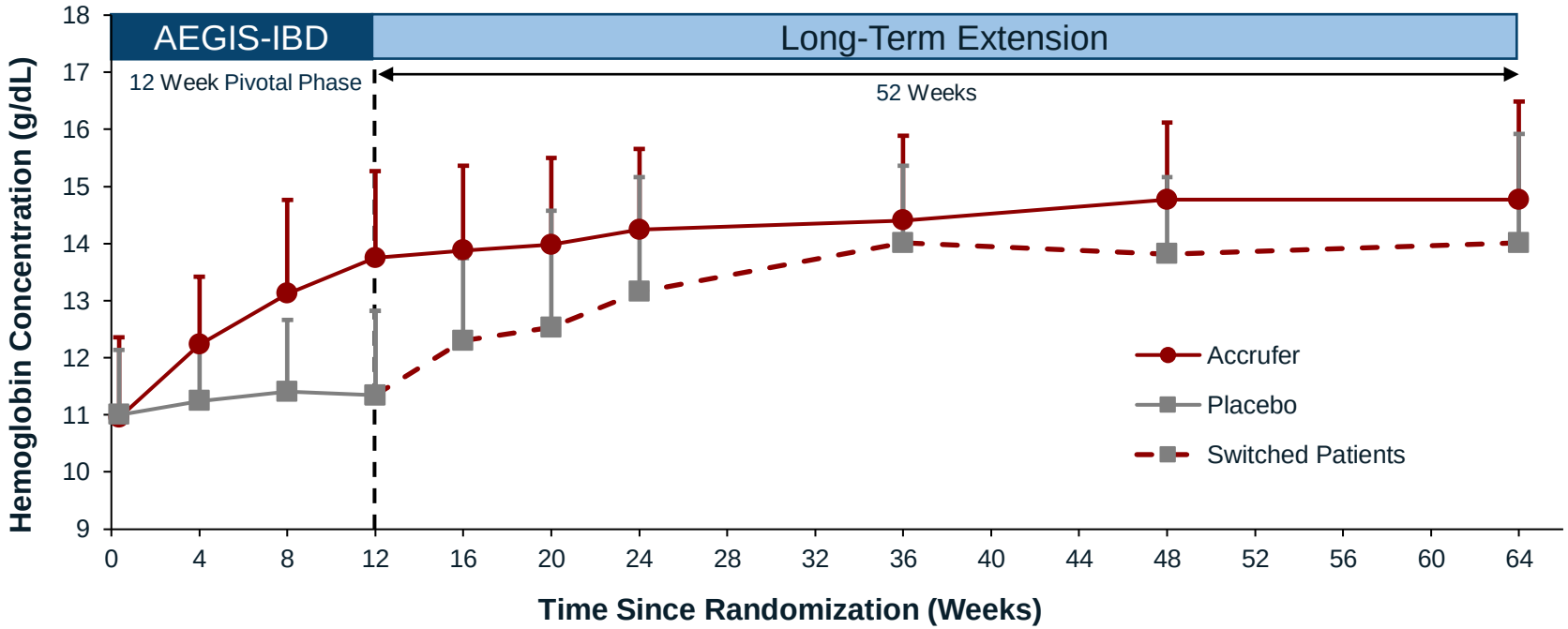
Accrufer®

Mean Hb concentrations (g/dL) increased from 11.0 at baseline to 13.95 at week 64

Mean Hb concentrations (g/dL) increased from 11.10 at baseline to 13.33 at week 64

Switched Patients

Absolute Hemoglobin Concentrations in Patients Over Time



Accrufer (n)	64	59	59	58	43	41	40	35
Placebo/Switched (n)	64	61	56	53	41	36	37	36

Hb, hemoglobin.

1. Schmidt C, et al. *Aliment Pharmacol Ther.* 2016;44(3):259-270.

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Accrufer® Was Shown To Be Safe and Well-Tolerated Across Phase 3 Studies

- A high proportion of patients taking Accrufer® completed 12 and 16 weeks of treatment in both the IBD and CKD populations[1,2]
- Neither short- or long-term Accrufer® treatment led to iron overload[2]
- The percentage of patients who discontinued treatment due to AEs was 4.6% for Accrufer®[2]

AEs by Preferred Term[2]

	Accrufer 30 mg BID (n = 175)	Placebo BID (n = 120)
Body System Adverse Reaction: GI		
Flatulence	4.6%	0%
Diarrhea	4%	1.7%
Constipation	4%	0.8%
Feces discolored	4%	0.8%
Abdominal pain	2.9%	2.5%
Nausea	1.7%	0.8%
Vomiting	1.7%	0%
Abdominal discomfort	1.1%	0%
Abdominal distension	1.1%	0%

IBD, inflammatory bowel disease; CKD, chronic kidney disease; AEs, adverse events; GI, gastrointestinal.

1. Gasche C, et al. *Inflamm Bowel Dis.* 2015;21(3):579-588. **2.** Accrufer (ferric maltol) [Prescribing Information]. Austin, TX: Shield Therapeutics, 2019.

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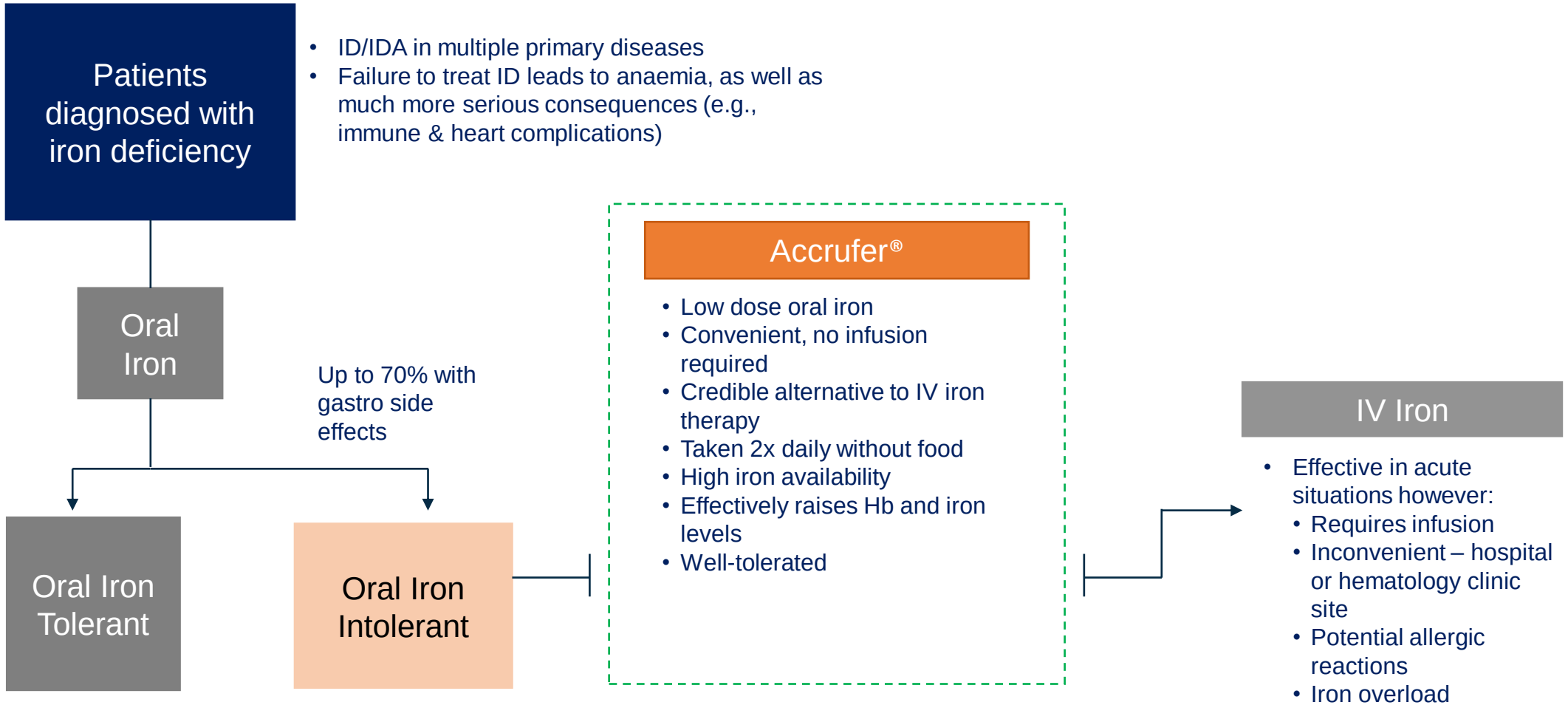
Accrufer® Can Occupy Area of Need between OTC and IV Iron



With a broad indication, Accrufer® can target multiple therapy areas

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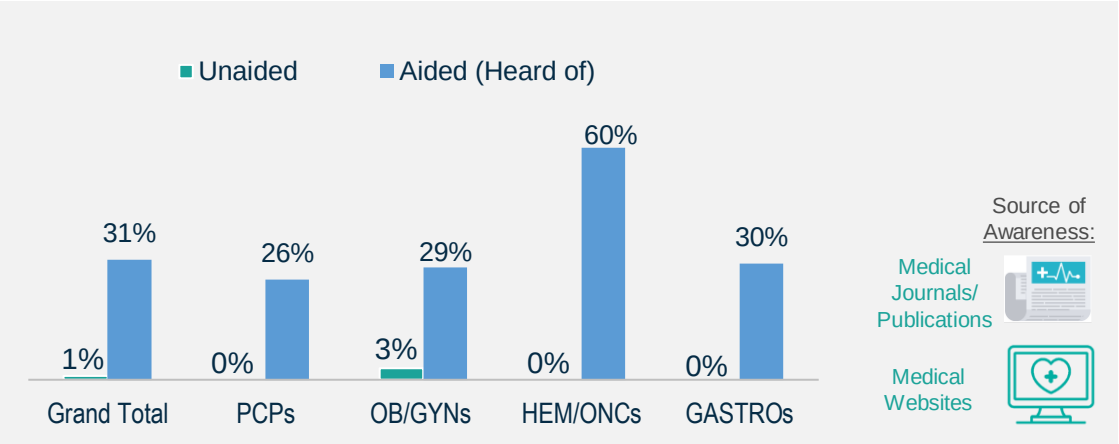
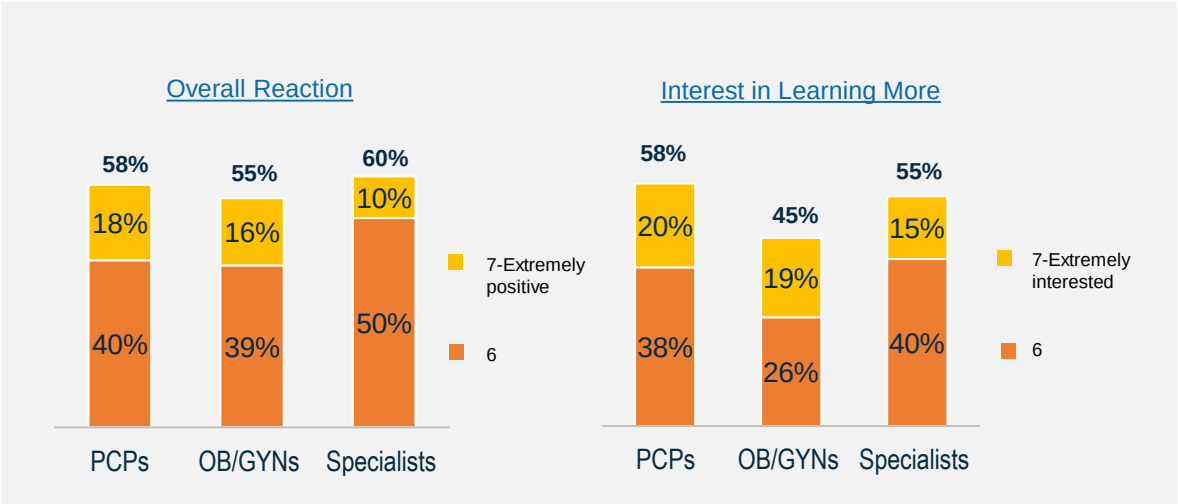
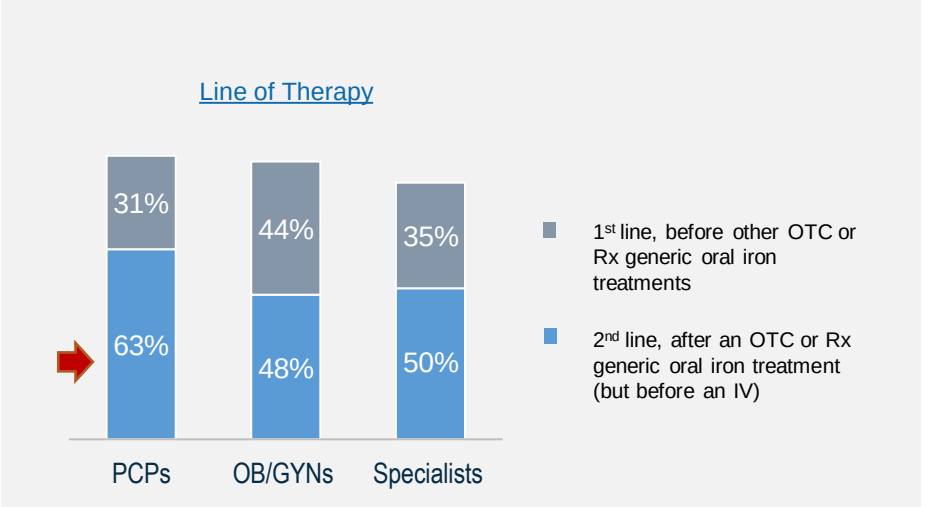
US Launch

Clinicians Respond Favorably to Accrufer® Profile

Treatment Awareness and Usage: Accrufer®







N= 101 (49 PCPs, 31 OB/GYNs, 10 Gastros and 10 Hem/Oncs) Specialists = Gastros + Hem/Oncs

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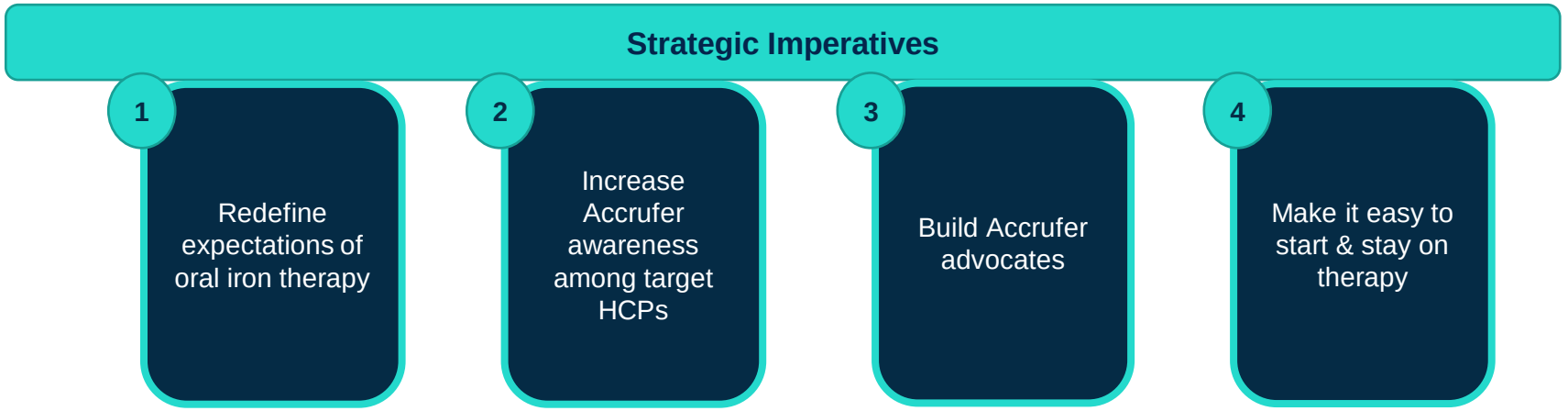
Critical Success Factors & Key Focus Areas



Increase awareness of Accrufer®

Generate clinical experience with patient access programs

Establish payer coverage

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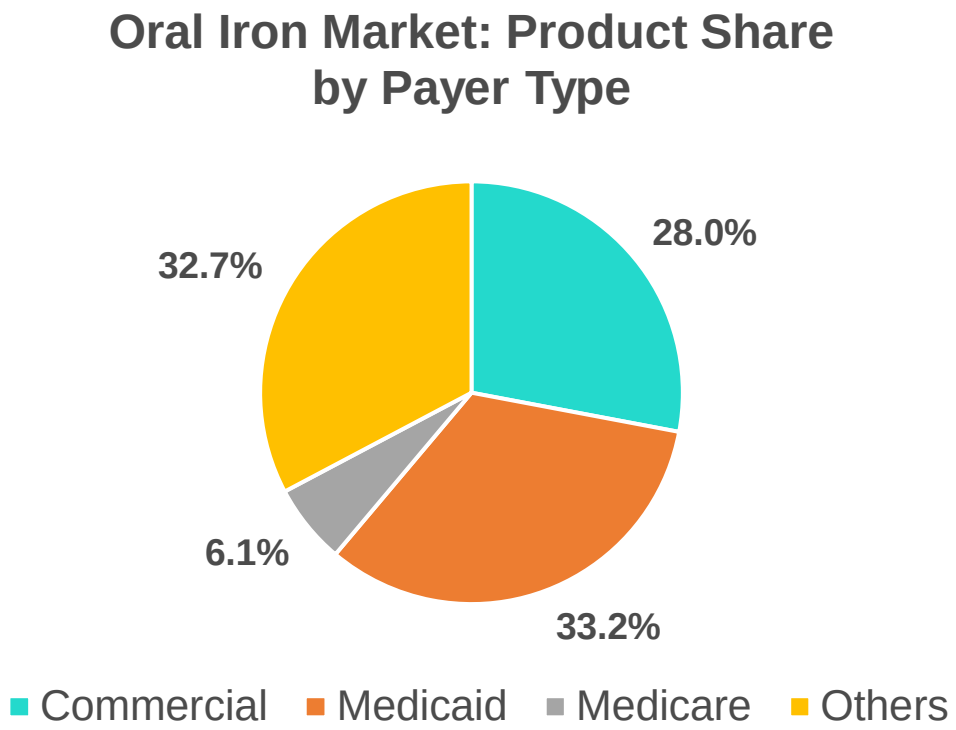
Commercial Plans and Medicaid are Predominant Payers for Oral Iron

- Initial focus on Commercial Payers and PBM's
- WAC Price for one month supply = $500
- Contracting positioning after failure of OTC/ 2nd line

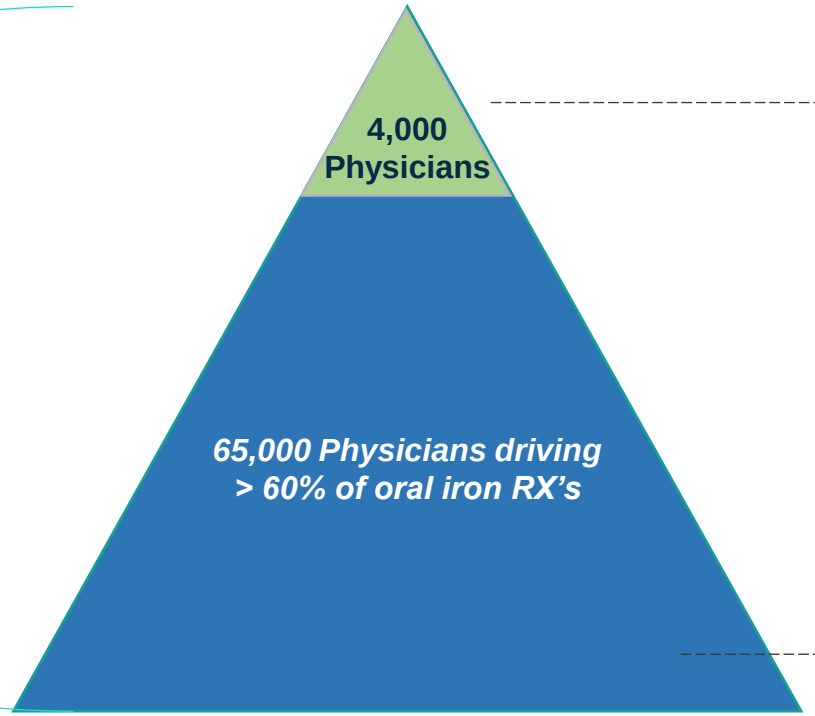


Note: *Commercial* Pay Type also includes claims with missing Plan ID, *Others* Pay Type includes TRx volumes as a result of Cash, CHIP and Unspecified Third Party
Source: Medical Claims and Xponent data, 12 month time period ending Dec 2019


ACCRUFeR®
(ferric maltol) 30 mg capsules
Discover the legend of tolerable oral iron
HEMOGLOBIN RISING
Accrufer® is uniquely formulated to provide both effectiveness
and takeability in an oral iron replacement[1]

Launch Strategy of Accrufer®

- Digital and media placements targeted to drive awareness launched Sept 1st



- Thirty sales representatives in the field effective July 1 promoting Accrufer® with the ability to cover 4'000 high-prescribing physicians
- Payer meetings and discussions ongoing
- Robust patient access program in place to generate clinical experience
- Phased increase in representatives and/or other tactics to increase reach coinciding with payer coverage

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Outlook & Summary