

# 2019 IIS Strategic Priorities

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## Hepatology - Compound: Glecaprevir and Pibrentasvir

AbbVie believes that the proposed HCV Micro-elimination<sup>1</sup> concept offers a pragmatic platform to meet the WHO target of eliminating viral hepatitis C as a major public health threat by 2030<sup>2</sup>.

HCV Micro-elimination breaks down HCV elimination into smaller goals for individual population segments. Diagnosis, linkage to care, treatment and prevention interventions can be delivered faster and more efficiently using targeted methods<sup>1</sup>.

AbbVie is interested in scientific study proposals which would address any of the following priority areas:

1. Micro-elimination study proposals:
  - a. In populations of interest defined by a well-defined geographic location or patient characteristic associated with risk for HCV infection or transmission. Examples include but are not limited to populations not engaged in health care, persons who use drugs and alcohol, incarcerated persons, persons with high risk sexual behaviors, hemophiliac cohorts, rehabilitation centers, needle exchange programs, addiction centers, renal care centers, health networks and populations from limited cities or regions.
  - b. Characterizing barriers to care and exploring sustainable HCV care cascade optimization including the following examples:
    - i. Screening and diagnosis: Explore innovative approaches to find undiagnosed patients, improve HCV screening and diagnosis.
    - ii. Linkage to care: Assess models to improve linkage to care and explore innovative strategies to increase rates of treatment initiation for newly and already diagnosed HCV patients.
    - iii. Simplification of therapy initiation and monitoring: Explore innovative approaches to and impact of optimizing and simplifying pre-treatment patient assessment, on treatment monitoring and long-term follow-up, and assess the benefits of short-duration pangenotypic treatment to further simplify HCV care.
2. Clinical and economic outcomes of hepatitis C treatment:
  - i. Innovative approaches to help better understand the full benefits of achieving a cure. Examples include but are not limited to impact on lifestyle, physical activity, extra-hepatic manifestations, emotional well-being, quality of life, work productivity and social benefits.
  - ii. Characterize long-term clinical outcomes of interest after a successful treatment as, for example, persistence of SVR, reinfection rate, liver-related and non-liver-related morbidity and mortality, changes in cognitive/behavioral/socio-economic outcomes.
  - iii. Understand the long-term health and economic benefits of treatment and treatment simplification models (including healthcare cost savings with shortening treatment duration)
3. Explore and characterize the descriptive epidemiology of HCV in regions of the world which have evolving, limited or no epidemiological information. Studies may include estimation of HCV prevalence and incidence of new HCV infection, trends over time and risk factors for new infection.

1. Lazarus et al, J Hepatology 2017 vol. 67, 665-666
2. WHO. Global Hepatitis Report 2017 Available at: <http://www.who.int/hepatitis/publications/global-hepatitis-report2017/en/> (accessed Nov 2018)

# Immunology-Dermatology - Compound: Adalimumab (HUMIRA)

## Dermatology / Psoriatic Disease

Compounds: Adalimumab (HUMIRA), Risankizumab

1. In vitro or in vivo research of risankizumab or IL-23 in the pathogenesis of psoriasis and/or psoriatic arthritis, and their associated comorbidities.
2. The impact of early intervention of risankizumab on psoriatic disease.
3. Epidemiology of psoriasis and psoriatic arthritis, associated comorbidities and markers for early detection of psoriasis and psoriatic arthritis.
4. Markers, instruments and diagnostic tools to assess disease progression, comorbidities, and response to risankizumab.
5. Impact of early systemic treatment, treatment goals and initiatives to advance quality of care in managing psoriasis.
6. Real World Evidence or interventional use of risankizumab: clinical impact, patient reported outcomes, health economic and healthcare resource utilization associated with psoriatic diseases and comorbidities.
7. Understanding treatment compliance, persistence, and adherence for psoriatic diseases.

\*No prospective studies for Adalimumab (Humira) will be considered.

## Dermatology / Hidradenitis Suppurativa (HS)

Compounds: Adalimumab (HUMIRA), Risankizumab

1. Natural course of the disease.
2. Practical diagnostic and monitoring tools that aid in disease classifications, activity, progression, and response to treatment.
3. Humanistic and economic burden of underdiagnosed/undertreated hidradenitis suppurativa.
4. Clinical and patient reported outcomes of treatment with immunologic therapy for HS.

\*No prospective studies for Adalimumab (Humira) will be considered.

## Dermatology / Atopic Dermatitis (AD)

Compound: Upadacitinib

1. Epidemiology, natural history and progression, education, management, comorbidities, and/or humanistic/economic burden of atopic dermatitis.
2. Pathophysiology of atopic dermatitis including JAK1 signaling or novel therapeutic targets.
3. Tools and markers that aid diagnosis, classification or evaluation of atopic dermatitis

## **Immunology-Gastroenterology - Compound: Adalimumab (HUMIRA), Risankizumab, and Upadacitinib**

Clinical interventional studies with upadacitinib & risankizumab are not supported.

For preclinical studies utilizing upadacitinib and risankizumab, only *ex-vivo*, or *in-vitro* studies will be considered.

1. Predictive and prognostic factors of disease severity and response to therapy in IBD (adult and pediatric)
2. Optimal monitoring of symptoms and inflammation in IBD (adult and pediatric)
3. Exploration of drug mechanisms and targeted therapy approaches in IBD
4. Broadening the knowledge about the role of early and sustained control of inflammation to prevent disease progression in IBD
5. Global burden of IBD (total cost of illness, quality of life, co-morbidities)
6. Evaluation of novel and/or exploratory biomarkers in IBD
7. Exploration of mechanisms of disease (disease state and novel therapeutic targets in IBD)
8. Broadening the knowledge of IL23 and JAK 1 pathways in IBD.

# Immunology-Rheumatology - Compound: Humira (Adalimumab) and Upadacitinib

**Any clinical studies with upadacitinib can only be initiated following regulatory/market approvals for respective indications in the country of interest.**

**No new interventional studies will be considered for Humira (adalimumab) in 2019.**

## **Overarching:**

1. Understand impact of Janus Kinase (JAK) signaling and inhibition of JAK signaling in rheumatologic diseases with high disease burden/unmet need, where clinical studies are not yet underway.

## **New Indication & Pipeline**

2. Understanding the role of JAKs in Giant Cell Arteritis (GCA) disease pathogenesis
3. Further understandings of unmet needs and burden of disease in the treatment of GCA
4. Understanding the role of JAKs and Bruton's Tyrosine Kinase (BTK) in systemic lupus erythematosus (SLE) disease pathogenesis
5. Understanding of unmet needs and burden of disease of SLE including assessment tools and treatments
6. Understanding of underlying pathophysiology of specific SLE phenotypes, and potential biomarkers of disease

## **Rheumatoid Arthritis**

7. Understand mechanistic basis for, and potential risk factors associated with risk of Herpes Zoster with JAK inhibition
8. Understand potential biomarkers predictive of upadacitinib efficacy response
9. Understand mechanistic basis for effectiveness of upadacitinib as monotherapy
10. Develop strategies to mitigate risk of Herpes Zoster in RA patients treated with JAK inhibitors
11. Understand patient characteristics associated with non-adherence to methotrexate
12. Develop and evaluate mechanisms to optimize adherence to oral therapies
13. Step down or sparing of methotrexate and/or corticosteroids in patients responding to upadacitinib plus Methotrexate and/or corticosteroids
14. Further understanding of clinical, imaging, patient reported and economic outcomes associated with patients achieving remission (including sustainability of remission) with upadacitinib.
15. Understand impact of upadacitinib treatment on novel PRO measures
16. Further understanding of JAK related pain mechanisms
17. Understanding the role of JAKs in Rheumatoid Arthritis disease pathogenesis
18. Further understanding of unmet needs and burden of disease in the treatment of RA with biologic or tsDMARD monotherapy

## **Axial SpA & PSA**

19. Development and validation of novel tools to measure patient relevant outcomes (e.g., function, pain, sleep, mood)
20. Real-world treatment patterns and with current and emerging therapeutic options in SpA diseases
21. New insights into epidemiology and burden of EAMs, comorbidities, and health economic outcomes in SpA
22. Deepen understanding of the pathophysiology of SpA and role and mechanism of IL-23 and JAK inhibition

## **Axial SpA**

23. Impact of residual axial (spinal) inflammation on clinically meaningful and patient-relevant long-term outcomes (e.g., physical function, structural progression)

## **PsA**

24. Develop and validate treatment targets for different domains of PsA. (e.g., joints, skin, enthesitis, etc.)

## Neuroscience - Parkinson's Disease – Compound: Duopa/Duodopa

1. Further understand the characteristics and/or burden of advanced Parkinson's disease (APD) including but not limited to patient, caregiver, and healthcare resource utilization, and to identify the right time for intervention using technology based objective measures (TOM).
2. Characterize APD medication management to achieve monotherapy with levodopa/carbidopa intestinal gel (LCIG) and describe the patient population that benefits most from monotherapy.
3. Evaluate efficacy and safety in subpopulations of APD patients including, but not limited to: elderly (>75 years of age), cognitively impaired, patients with impulse control disorders (ICDs), difficult to treat dyskinesia, freezing of gait, and axial symptoms in whom oral treatments no longer offer benefits.
4. Further evaluate LCIG and levodopa/dopaminergic response including, but not limited to:
  - a. Bridging continuous drug delivery (CDD) to continuous dopaminergic stimulation (CDS),
  - b. Further understanding the characteristics of LCIG patient population and responders, clinical assessment tools, and key clinical and/or health economic outcomes, including but not limited to: i. Patient and caregiver-related outcomes; ii. Non-motor symptoms (NMS); iii. Retrospective long term efficacy and safety outcomes,
  - c. Efficacy and safety of treatment modalities including but not limited to: outpatient titration, use for a duration of > 16 hours/day, and
  - d. Understanding the use of LCIG in combination with or after failure with other “device-aided therapies” (e.g. DBS).
5. Using technology based objective measures (TOM), (e.g. wearable devices, biosensors) as surrogates of efficacy and safety of LCIG in APD patients and to establish validity of these measurements compared to paper-pencil instruments and patient reported outcomes.
6. Additional focus areas:
  - a. Understanding the impact of multi-disciplinary care models in APD,
  - b. Identify the role of the gut microbiome in APD and in the response to LCIG, and

Evaluation of new tubing technologies and/or placement procedures with the goal to enhance efficacy and safety of LCIG delivery

## Oncology - Compound: Rovalpituzumab Tesirine (Rova-T)

Rovalpituzumab teserine (Rova-T) is an antibody-drug complex (ADC) targeted to DLL3 which is expressed on the surface of neuroendocrine tumors including SCLC. Consideration will be given to both preclinical and clinical (non-interventional) applications. However, based on clinical stage of development where the risk, benefit and safety profiles are still being assessed in different disease states, ***limited preclinical and clinical proposals will be supported in 2019.***

Priority will be given to applications proposing to investigate the following areas:

1. Novel Therapeutic combinations where there is scientific rationale
2. Increasing the scientific body of evidence evaluating DLL3 as a biomarker

### **Things to consider for the investigator:**

2019 limited ability to support proposals that require monetary funding outside of drug-only proposals.

## Oncology - Compound: Veliparib (ABT-888)

Veliparib is a PARP inhibitor with scientific rationale for therapeutic impact across a broad variety of tumor types. Consideration will be given to both preclinical and clinical applications in 2019. Based on the clinical stage of development where the risk, benefit and safety profiles are still being assessed in different disease states, ***there will be limited clinical proposals considered.***

Priority will be given to applications proposing to investigate the following areas:

- Novel therapeutic combinations
- Novel clinical indications where there is scientific rationale
- Evaluation of novel and/or exploratory biomarkers (disease state and therapeutic targets)

### **Things to consider for the investigator:**

2019 limited ability to support proposals that require monetary funding outside of drug only proposals.

## **Oncology - Compound: Venetoclax (ABT-199)**

Venetoclax is a BCL2 inhibitor with scientific rationale for evaluation across a broad variety of Hematologic malignancies and solid tumors. Consideration will be given to both preclinical and clinical applications in 2019.

Priority will be given to applications proposing to investigate the following areas:

- Novel therapeutic combinations
- Novel clinical indications where there is scientific rationale
- Evaluation of novel and/or exploratory predictive models or biomarkers
- Evaluation of novel and additional clinical endpoints

Notable considerations for the investigator:

- Limited funds may be available to support proposals

## **Oncology - Compound: Telisotuzumab-Vedotin (ABBV-399)**

Telisotuzumab -vedotin (ABBV-399) is a c-MET antibody-drug conjugate with a scientific rationale across a broad variety of malignancies. Based on their early stage of development, consideration *will only be given to limited preclinical and clinical study applications in 2019*.

Priority will be given to applications proposing to investigate the following areas:

- Novel therapeutic combinations
- Novel clinical indications where there is scientific rationale
- Evaluation of novel and/or exploratory biomarkers (disease state and therapeutic targets)

### **Things to consider for the investigator:**

- 2019 limited ability to support proposals that require monetary funding outside of drug-only proposals.

## Oncology - Compound: ABBV-621

ABBV-621 is a fusion protein TRAIL agonist with a scientific rationale across a broad variety of malignancies. Based on their early stage of development, consideration *will only be given to limited preclinical and clinical study applications in 2019*.

Priority will be given to applications proposing to investigate the following areas:

- Novel therapeutic combinations
- Novel clinical indications where there is scientific rationale
- Evaluation of novel and/or exploratory biomarkers (disease state and therapeutic targets)

**Things to consider for the investigator:**

2019 limited ability to support proposals that require monetary funding outside of drug-only proposals.

## Oncology - Compound: ABT-165

ABT-165 is a VEGF and DLL4 targeted dual variable domain antibody with a scientific rationale across a broad variety of malignancies. Based on their early stage of development, consideration *will only be given to limited preclinical and clinical study applications in 2019*.

Priority will be given to applications proposing to investigate the following areas:

- Novel therapeutic combinations
- Novel clinical indications where there is scientific rationale
- Evaluation of novel and/or exploratory biomarkers (disease state and therapeutic targets)

### **Things to consider for the investigator:**

2019 limited ability to support proposals that require monetary funding outside of drug-only proposals.

## Endo-Metabolic - Compound: Creon

Abbvie is interested in scientific study proposals that would address the following priority clinical areas:

1. New insights into prevalence of EPI, disease burden, pathophysiologic link, and clinical impact of treating EPI in, but not limited to:
  - Acute Pancreatitis;
  - Diabetes (Types 1, 2, and 3c);
  - IBS, Celiac Disease, IBD.
2. Outcomes in exocrine pancreatic insufficiency (EPI) patients treated with CREON such as, but not limited to:
  - Chronic Pancreatitis;
  - Acute pancreatitis;
  - Pancreatectomy;
  - Other GI surgeries associated with EPI (e.g. pre- and post-operative nutritional outcomes);
  - Cystic Fibrosis;
  - Other conditions associated with EPI.
3. Novel approaches (clinical tools, biomarkers, devices) that assure a quicker diagnosis of EPI, improve adequate PERT dosing, and/or improve adherence for patients.
4. New approaches to assess efficacy of PERT beyond traditional stool fat measurements (CFA).

## **Women's Health - Benign Gynecologic Diseases**

### **Endometriosis Related Priorities**

- Use of elagolix to assess whether surgical outcomes are improved, or disease recurrence is prevented post-surgery.
- Use of elagolix to assess whether disease state is modified, or not, with supporting evidence.
- Assess use of elagolix with progestogen only contraception including IUD implant and progestogen only pill – safety & efficacy of elagolix and IUD, effect on pain.
- Management of central sensitization in elagolix non-responders.
- Differentiation of GnRH analog MOA and clinical implications (including appropriate in vivo and in vitro non-human models).
- Evaluation of the economic QoL, productivity benefits of elagolix.

### **Uterine Fibroids Related Priorities**

- Assess use of elagolix pre and post-surgery for outcomes and disease recurrence.
- Assess use of elagolix with contraceptives.

### **Women's Health – Other areas of interest**

- Assess novel clinical applications of elagolix with a focus on Women's Health.

## **Neonatology – Compound: Synagis (Japan Only)**

1. Risk and associated morbidity and mortality of severe RSV infection among infants and children with underlying medical conditions or chronic diseases.