NEXTSTEPS IN DERM | GW School of Medicine & Health Sciences

Upadacitinib Therapeutic Cheat Sheet

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TRADE NAME

- RINVOQ®

MECHANISM OF ACTION[2]

- Upadacitinib inhibits intracellular cytoplasmic enzymes Janus kinases (JAK), a group of four tyrosine kinases that phosphorylate signal transducers and activators of transcription (STATs) in the JAK-STAT pathway, which regulates gene expression and influences hematopoiesis and immune cell function
- Upadacitinib has a selective and more prominent inhibitory influence on JAK1 compared to JAK2, JAK3, and TYK2 subtypes

FDA APPROVED FOR[3]

- Adults and children 12 years of age and older with moderate to severe atopic dermatitis (AD) whose disease did not respond to previous treatment and is not well controlled with pills or injections, including biologic medicines, or when use of other pills or injections is not recommended
- Adults with active ankylosing spondylitis and active non-radiographic axial spondyloarthritis when 1 or more TNF blockers have failed
- Adults with moderate to severe rheumatoid arthritis (RA) when 1 or more TNF blockers have failed
- Adults with active psoriatic arthritis (PsA) when 1 or more TNF blockers have failed
- Adults with moderate to severe ulcerative colitis (UC) when 1 or more TNF blockers have failed

OFF-LABEL USES[4-10]

- Alopecia Areata
- Hidradenitis Suppurativa
- Crohn's Disease
- Systemic Lupus Erythematosus
- Non-segmental vitiligo*
- Giant Cell arteritis*

* The treatment of these conditions with upadacitinib are currently being studied and have yet to be published

DOSING[11]

- Psoriatic Arthritis
  - 15 mg once daily
- Atopic Dermatitis*
  - Patients 12- 65 years old
    - Initiate treatment with 15mg once daily. If adequate response is not achieved, consider increasing it to 30mg once daily. Discontinue if adequateresponse is not achieved with 30 mg dose
  - Patients 65 years old and older
    - 15mg once daily

*FDA recommended dosage is 15mg once daily for atopic dermatitis patients with severe renal impairment (eGFR 15 to <30mL/min)

SIDE EFFECTS [11]

Most common side effects of RINVOQ® in people treated for rheumatoid arthritis, psoriatic arthritis, and ankylosing spondylitis include:

- upper respiratory tract infections (common cold, sinus infections)
- shingles (herpes zoster)
- herpes simplex virus infections, including cold sores
- nausea
- bronchitis
- cough
- fever
- acne
- headache

Most common side effects of RINVOQ® in people treated for atopic dermatitis include:

- upper respiratory tract infections (common cold, sinus infections)
- acne
- herpes simplex virus infections, including cold sores
- headache
- increased blood levels of creatine phosphokinase
- cough
- allergic reactions
- inflammation of hair follicles
- nausea
- abdominal pain
- fever
- increased weight
- shingles (herpes zoster)
- flu
- fatigue
- neutropenia
- muscle pain
- flu-like illness

WARNINGS[11]

- **Serious infections**- Increased risk of serious bacterial, fungal, viral, and opportunistic infections leading to hospitalization or death, including tuberculosis (TB). Avoid use in patients with active, serious infection, including localized infections. Stop treatment with RINVOQ® if serious infection occurs until the infection is controlled.
- **Major adverse cardiovascular events (MACE)**- Higher rate of all-cause mortality, including sudden cardiovascular death with a Janus kinase (JAK) inhibitor vs. tumor necrosis factor (TNF) blockers in rheumatoid arthritis (RA) patients. Higher rate of MACE (defined as cardiovascular death, myocardial infarction, and stroke) with another JAK inhibitor vs. TNF blockers in RA patients.
- **Malignancies**- Malignancies have occurred in patients treated with RINVOQ®. Higher rate of lymphomas and lung cancers with another JAK inhibitor vs. TNF blockers in RA patients.
- **Thrombosis**- Thrombosis has occurred in patients treated with RINVOQ®. Increased incidence of pulmonary embolism, venous and arterial thrombosis with another JAK inhibitor vs. TNF blockers.
- **Hypersensitivity**- Serious hypersensitivity reactions (e.g., anaphylaxis) have been reported. Discontinue if a serious hypersensitivity reaction occurs
- **Gastrointestinal (GI) Perforations**- Monitor patients at risk for GI perforations and promptly evaluate patients with symptoms.
- **Laboratory Abnormalities**: Monitoring recommended due to potential changes in lymphocytes, neutrophils, hemoglobin, liver enzymes and lipids.
- **Embryo-Fetal Toxicity**: May cause fetal harm based on animal studies.
- **Vaccinations**: Avoid use with live vaccines.

CONTRAINDICATIONS[11]

- Patients with known hypersensitivity to upadacitinib or any of the excipients in RINVOQ®

PREGNANCY & BREASTFEEDING[8]

- Based on animal studies, upadacitinib may cause embryo-fetal harm when administered to pregnant women.
- Advise female patients of reproductive potential of the potential risk to a fetus and to use effective contraception.
- Advise women not to breastfeed during treatment with RINVOQ® and for 6 days after the last dose.

MONITORING[2,11]

- A negative tuberculosis (TB) test is required as it may activate a latent TB infection. Test all patients for active or latent TB before and routinely during therapy, even patients with initial negative TB test; treat latent TB prior to use.
- Verify the pregnancy status of females of reproductive potential prior to starting treatment with RINVOQ®. Advise female patients of reproductive potential to use effective contraception during treatment with RINVOQ® and for 4 weeks after the final dose.
- Check a Complete Blood Count (CBC) before and routinely during therapy assessing for absolute lymphocyte count (ALC), absolute neutrophil count (ANC), hemoglobin (Hb), lymphopenia, neutropenia and anemia. It is not recommended to initiate upadacitinib in patients with ALC below 500 cells/mm3 and ANC below 1000 cells/mm3.
- Check Liver Function Tests (LFTs) before initiating treatment and regularly thereafter as patients with severe hepatic impairment are not recommended to start treatment.
- Check a Lipid Panel before initiating treatment assessing for elevated levels of total cholesterol, low-density protein (LDL) and high-density lipoprotein (HDL). A Lipid Panel should be reassessed 12 weeks after starting treatment and as needed as increases may occur and prompt management.
- Monitoring for reactivation of previous Hepatitis B virus (HBV) or Herpes Zoster (HZV) infections is recommended given reports of these infections during clinical studies. Upadacitinib should be discontinued temporarily until HZV is resolved.
- Those with an increased risk for skin cancers are recommended to have routine skin cancer evaluations given an increased risk for non-melanoma skin cancers (NMSCs).
- Patients on upadacitinib with concomitant use of NSAIDs should be monitored for new onset GI perforations given reports during clinical studies.