

## **Perioperative Use of DMARDs/Biologic Agents in Adult Patients with Inflammatory Conditions Undergoing Elective Surgery**

*This guidance is aimed at patients on DMARD's and biologic agents for both gastrointestinal disease such as crohns or ulcerative colitis, and for rheumatology patients.*

*Note that In SLE, we should have a lower threshold to discuss treatment with rheumatologist as interruption in treatment can be organ threatening so risk/benefit discussion is different\*.*

### **Medication to be continued**

#### Corticosteroids

*Commonly used in RA, also in SLE/vasculitis in higher doses. Patients can be getting IM injections of kenalog in rheumatology clinics and this is often not apparent in medical notes-ask about this in the preassessment clinic.*

Methotrexate (evidence is rather limited, and based on smaller doses) NB important interaction with trimethoprim-marrow aplasia

#### Hydroxychloroquine

#### Sulfasalazine

#### Leflunomide

#### Azathioprine

#### Cyclosporine

### **Medication potentially requiring to be withheld**

**Adalimumab** (Humira), **Etanercept** (Enbrel), **Golimumab**, **Infliximab**, **Certolizumab** (Cimza),

The above may be continued with minor surgery, but require one drug dose omitted prior to major procedures. Can be restarted after 10-14 days if wound satisfactory.

#### **Tocilizumab**

May be continued for minor surgery. Require to be stopped for major surgery (2 weeks for subcutaneous (SC) preparations, 4 weeks for intravenous (IV) preparations).

#### **Vedolizumab**

For intermediate and major surgery withhold 3 weeks pre-op

**Ustekinumab**-consult with prescribing physician

### Medication requiring to be withheld

**Rituximab (put out for anaesthetic review, will require discussion with prescribing physician)** is an CD20 antibody (second line biological therapy for RA. Completely depletes them of B cells for at least 6 months. B cell depletion is rapid but variable.

Surgery delayed for at least 3 months after last dose.

**Anti TNF**-put out for anaesthetic review, depending on severity of surgery may need withheld for longer periods. Pragmatic approach is to schedule surgery for week after next scheduled dose, but in procedures deemed to be at a high risk of infection, a longer period may be required. May need to be discussion with prescribing physician and surgeon.

Drug	Dosing Interval	Period in which Surgery should be scheduled relative to last biologic dose
Etanercept	SC weekly	Week 2
Adalimumab	SC fortnightly	Week 3
Infliximab	IV Every 4, 6 or 8 weeks	Week 5,7 or 9
Certolizumab	SC fortnightly	Week 3
Golimumab	SC Every 4 weeks	Week 5
Rituximab	IV 2 doses 2 weeks apart usually repeated every 6/12	Months 4-7
Tocilizumab	IV every 4 weeks SC weekly	Week 5 Week 3
Sarilumab	SC Every 2 weeks	Week 4
Secukinumab	SC monthly	12 weeks
Ixekizumab	SC monthly	Week 10
Abatacept	IV monthly SC weekly	Week 5 Week 3
Ustekinumab	SC Every 12 weeks	Week 13
JAK inhibitors	Daily oral	2 days after last dose