

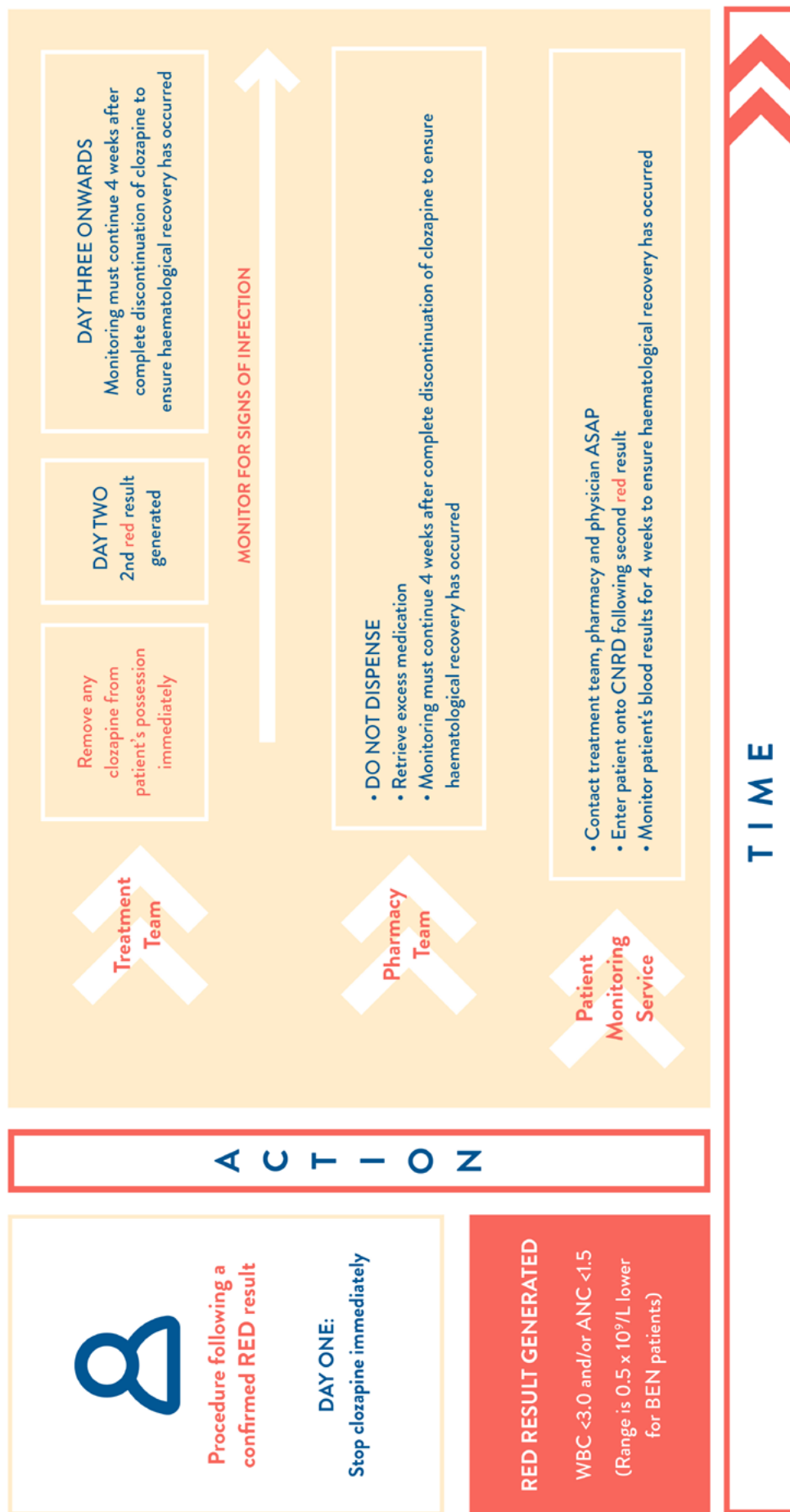
RESOURCES

Monitoring

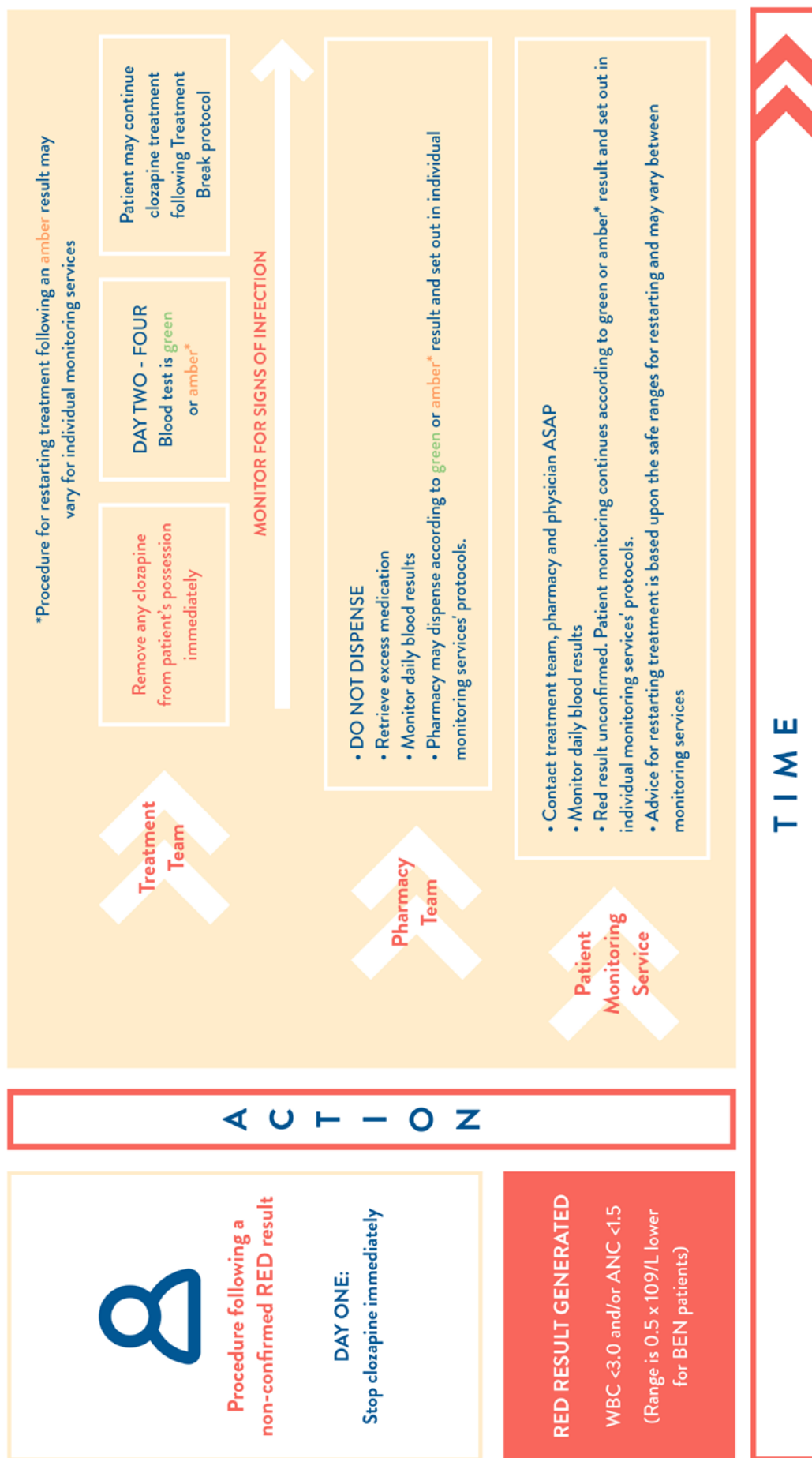
Clozapine - A Concise Clinical Overview



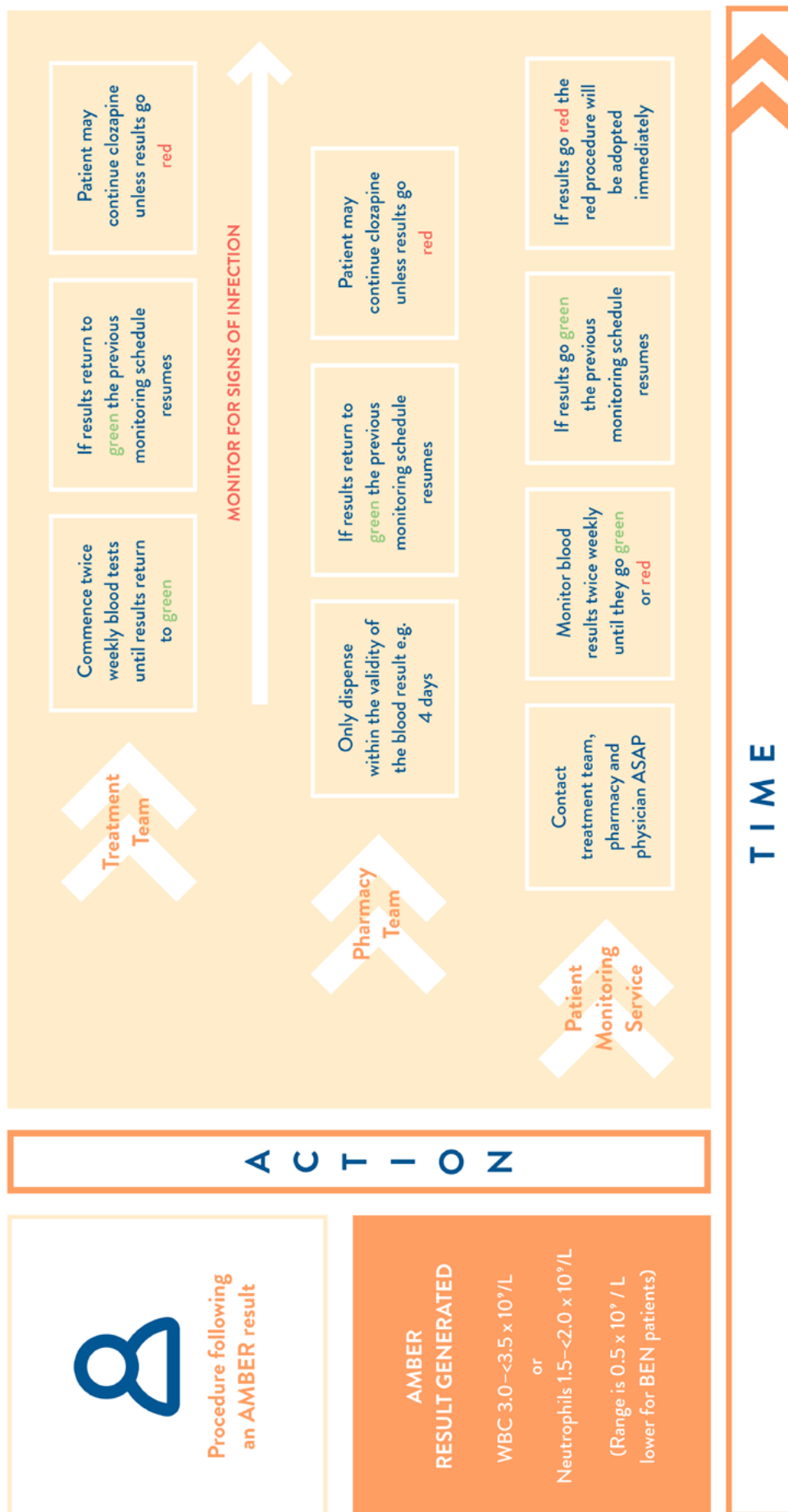
Managing Red Alerts - Confirmed



Managing Red Alerts - Non-Confirmed



Managing Amber Alerts



Procedure following an AMBER result

AMBER RESULT GENERATED

WBC $3.0 - <3.5 \times 10^9/L$
or
Neutrophils $1.5 - <2.0 \times 10^9/L$
(Range is $0.5 \times 10^9/L$ lower for BEN patients)

ACTION

TIME

Blood Monitoring Schedule

Everyone who takes clozapine must have regular Full Blood Count tests to check that their white blood cell numbers stay within the safe range.

The decision to commence, continue or stop treatment will be governed by the FBCs results which must be within strict parameters laid down by the HPRA. Once a patient is registered and commences therapy, the patient must be monitored as follows:



- After 18 weeks of treatment the patient will have blood samples taken at least fortnightly for the remainder of the year
- After one year of treatment, if the patient is compliant and the haematological profile is stable, the frequency of blood testing can be reduced to at least 4 weekly intervals
- If the patient's haematological profile becomes unstable, the frequency of blood monitoring will increase until a stable profile is attained or treatment is stopped
- Monitoring must continue throughout treatment and for at least 4 weeks after discontinuation

Blood Monitoring Ranges

If a patient has a **RED** or **AMBER** alert, there are specific procedures that must be followed in order to ensure patient safety.

These are outlined below:

GREEN (NORMAL)	
WBC $\geq 3.5 \times 10^9/L$ & Neutrophils $\geq 2.0 \times 10^9/L$	Continue clozapine treatment
AMBER (MILD NEUTROPENIA)	
WBC $3.0 - < 3.5 \times 10^9/L$ or Neutrophils $1.5 - < 2.0 \times 10^9/L$ <small>Note: Range is $0.5 \times 10^9/L$ lower for BEN patients</small>	Continue clozapine treatment, sample blood twice weekly until counts stabilise or increase
RED (NEUTROPENIA)	
WBC $< 3.0 \times 10^9/L$ or Neutrophils $< 1.5 \times 10^9/L$ <small>Note: Range is $0.5 \times 10^9/L$ lower for BEN patients</small>	Immediately stop clozapine treatment. Sample blood daily until haematological abnormality is resolved. Monitor for infection. Do not re-expose the patient.

Some patients naturally have a lower neutropenic level, these patients have Benign Ethnic Neutropenia (BEN). They have a slightly different 'normal' haematological profile. The WBC and ANC parameters will be reduced by $0.5 \times 10^9/L$ for patients who have been diagnosed as BEN by a consultant haematologist.

Frequency & Duration of Blood Pressure Monitoring

The frequency and duration of blood pressure monitoring varies between different organisations and different settings. The Clozapine Handbook recommends the following monitoring regimen, however please check your local Trust guidelines for inpatient and outpatient monitoring guidelines.

BLOOD PRESSURE (BP) MONITORING REGIMEN	
Day 1	Prior to the first dose and every hour for 6 hours after the dose, or until bedtime.
Day 2	Prior to the first dose and repeated 2 & 6 hours after the dose.
Day 3-14	Prior to the first dose and 6 hours after the dose.
After Day 14	Once daily.