Common questions about paracetamol and ibuprofen

What are paracetamol and ibuprofen?
Paracetamol (Pamol, Panadol) and ibuprofen (Nurofen, Brufen, FenPaed) are two of the most common medications used to treat pain and fever in babies and children.

Although paracetamol and ibuprofen are different, they have similar actions as both modify inflammatory pathways.

Which medicine is more effective – paracetamol or ibuprofen?
Ibuprofen and paracetamol are equally good at treating pain and reducing fever in babies.

Is ibuprofen a “stronger” medicine than paracetamol?
Ibuprofen and paracetamol are equally strong for treatment of pain and fever. Ibuprofen has more anti-inflammatory effect (e.g., reducing redness and swelling). This is why it is often used to treat joint and muscle pain in adults.

Which medicine is safer – paracetamol or ibuprofen?
Side effects from these medicines are very rare in children. Paracetamol can cause liver damage if too much is given. Ibuprofen can cause gut problems and affect kidney function, but usually only in children with other health problems. When taken correctly (according to the instructions on the bottle) both medicines are very safe.

Is ibuprofen safe in young babies?
A large study in over 27,000 babies under 2 years of age found no difference in rates of side effects between ibuprofen or paracetamol (Lesko, Pediatrics 1999). Ibuprofen is also commonly used in fragile preterm babies for treatment of a patent heart duct and is well tolerated.

Why am I often told to use paracetamol first instead of ibuprofen?
Paracetamol and ibuprofen are equally acceptable for treating pain and reducing fever in babies. In New Zealand, paracetamol is often used first because it is more widely available but in many countries ibuprofen is used in preference to paracetamol.

In the past, some doctors advised against use of ibuprofen because of a small increased risk of skin infection when used to treat fever due to chicken pox. However, paracetamol is also associated with increased risk of skin infection in chicken pox. This is no longer a concern as all children are now vaccinated against chicken pox.

Some primary care doctors may be less familiar with giving ibuprofen to babies, but either can be used as first line treatment. The use of ibuprofen and paracetamol in the PIPPA Tamariki study has been endorsed by paediatric specialists at Starship and Kidz First Hospitals who have the most experience in looking after babies.

Is it more effective to give both medicines together?
In most cases one medicine is sufficient for treating pain or fever. Routine use of combination treatment is not recommended by paediatric specialists.

Being in the PIPPA Tamariki study does not prevent use of both medicines, but babies should generally only have the allocated medicine whenever possible.

Can ibuprofen be used in asthma?
Some adults with asthma get more wheezy with anti-inflammatory medicines, but severe reactions are very uncommon. Babies under 1 year of age do not get asthma. The PIPPA Tamariki study is aiming to find out if exclusive use of either paracetamol or ibuprofen in the first year of life, alters risk of developing allergic disease, including risk of asthma at 6 years of age.