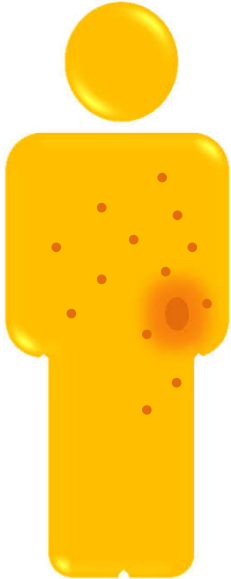


Conventional drugs



Nanotech based drugs



Drug delivery: localized and sustained release

Nanopharmaceuticals: main advantages

- Improved biocompatibility;
- Controlled release;
- Increased concentration at the target;
- Improved stability and prevention of drug degradation;
- Biological target selectivity:
 - ✓ Reduced quantity of required drug active principle;
 - ✓ Reduced side effects;
- Protection of fragile drugs and proteins from severe biological environments;
- Faster, safer, and more accurate disease diagnosis;
- No vessel clogging, no impairment to blood circulation;
- Drug molecule can be endocytosed / phagocytosed by the target cell;
- Drug can cross some biological barriers.

Global Market*



*Source: Nano Science & Technology Consortium



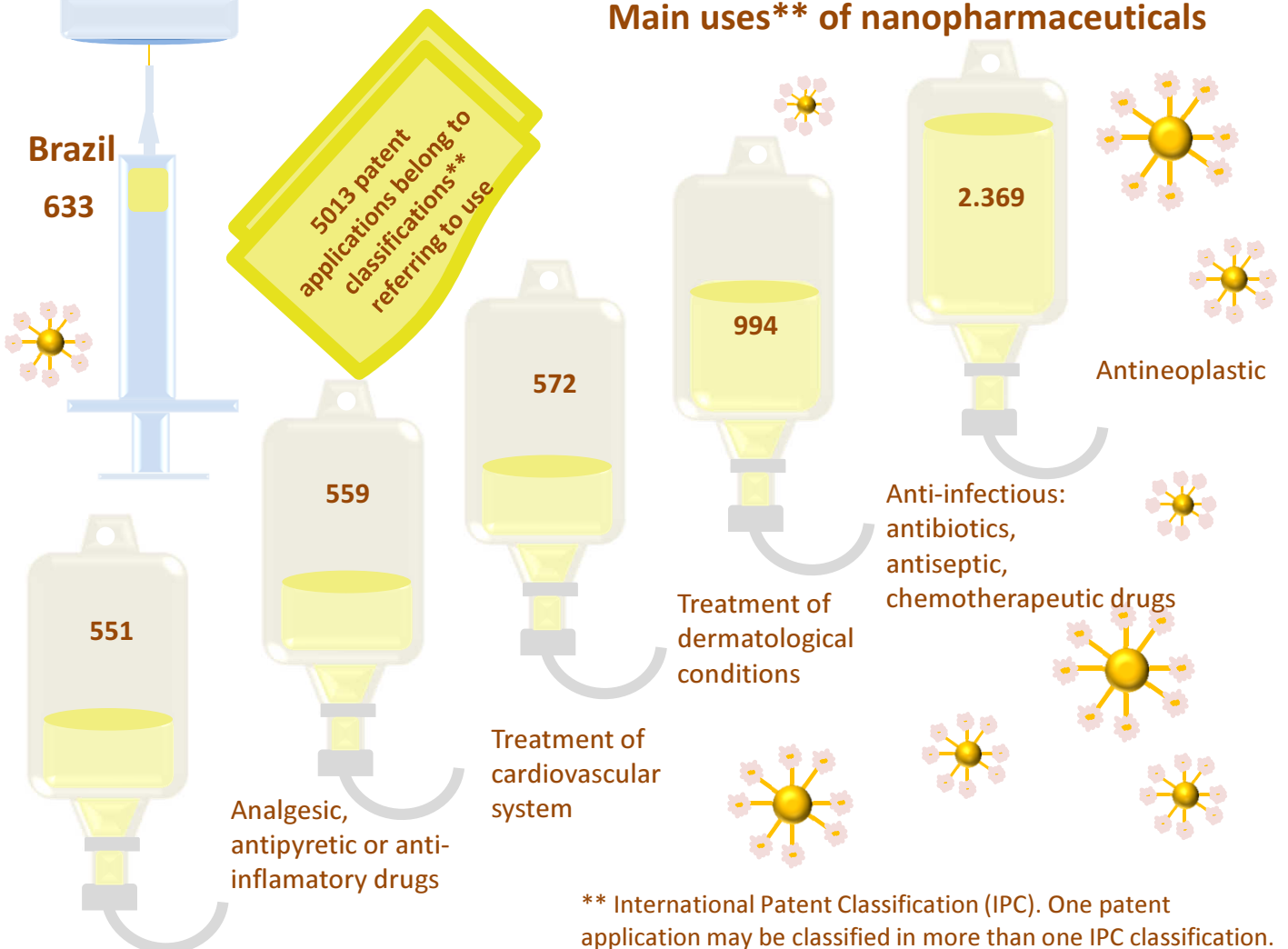
61% of this sample belong to classifications** referring to preparations characterized by special physical forms

1. particles: 2.818
2. capsules: 1.923
3. dispersions and emulsions: 1.798
4. pills or tablets: 287
5. Medicinal preparations characterized by special physical form, : web, sheet or filament bases : 244

Main countries of technology origin (priority)



Brazil
633



** International Patent Classification (IPC). One patent application may be classified in more than one IPC classification.