

## Differences Between Commercial and Clinical Trial Supply Chains

<b>Supply-chain parameter</b>	<b>Development supply-chain</b>	<b>Commercial supply-chain</b>
Inventory	Expensed to profit & loss	Balance sheet asset
Demand/capacity	Determinate – set by clinic protocols	Uncertain - driven by patient markets
Working capital	Relatively Low	High
Agreements	Investigator, CRO's, development, quality/technical	Licensing, distribution, quality/technical and commercial supply
Compliance	Increasing cGXP applies	Validation, change control, traceability, Pre-approval inspections.
Insurance	Relatively Limited	Product liability, marine insurance, etc
Supply base calibre	Support needs of specific studies	Able to cope with long term market supply
Cost of goods	High - immature processes and low volume	Need to manage cost reduction to leverage higher volumes/process maturity
Distribution logistics	Mainly express couriers to sites	Complex channel networks to wholesalers/clinics/hospitals/pharmacies
International movements	Shipped as research materials	Liable to stringent assessment because of implications for duty, tax etc
Packaging	Mainly regulatory driven, simple design and origination	Many stakeholders for approval and complex reprographics/origination