

# BilcareOptima™

## The first Scientific method for developing optimum Packaging for Pharmaceutical formulations

Bilcare developed the first scientific packaging development method for the pharmaceutical oral dosage forms. The present method which customers follows globally is only a confirmatory test of the selected package for a given climatic conditions. This indigenously developed, novel scientific method for the packaging development is able to understand the packaging needs of the particular formulation through scientifically designed formulation evaluation studies. This method quantifies the environmental & dimensional sensitivity of the formulation and helps to arrive at optimal protection level. These quantitative values will be then converted into the barrier requirement for protection. The packaging material and packaging options will be developed based on this barrier requirement.

Most of the products existing is either over packed or under packed. Over packed because there is no packaging development method available to understand ideal protection requirements of the drug and then develop the appropriate pack. Under packed because the conventional stability study programs, which are used for confirming the efficacy of the pack, are designed for climatic zone 1 & 2. We also cannot understand the influence of the environmental parameters like humidity, temperature and light individually and hence the stability study conducted by exposing the product to a combination of these parameters does not reflect the actual extreme conditions where one of the parameter could be in extreme.

There fore it is of prime importance to understand each formulation for its environmental sensitiveness and packaging needs before designing its package. This is the prime draw back of conventional packaging development method, which is based on a trial and error method. Even the size and shape of the dosage form are trivial factors in deciding the film complex used for blister packaging.

Any packaging selection done without understanding these factors is prone to failure.

Now with BilcareOptima – a scientific method of packaging development (patent pending), optimum packaging can be provided to every drug formulation which will be cost effective at the same time protect the product comprehensively.

### What are the benefits?

- Able to introduce the product in the most optimum pack and hence saves significantly on the packaging cost from the introduction stage itself.
- An effective packaging cost reduction tool as presently almost all packages are over packed.
- Saves significant amount which normally spend on multiple pack stability studies to arrive at a packing close to optimum.
- Complete documentation on scientifically developed packing is available.
- Able to design the packing for specific climatic conditions.

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