

Functional Studies in Human Bladder

Biopta Ltd is a GLP certified Contract Research Organisation specialising in human tissue models which improve the predictability of drug development. We utilise ethically donated fresh human tissues to provide either human proof of concept data or to detect potential human adverse effects.

These human *in vitro* pharmacology studies bridge the gap between animal *in vivo* data and the clinic and offer invaluable human data much earlier in drug development.

One of Biopta's key areas of expertise is the assessment of contractile and relaxatory responses in fresh, functional human tissues, including bladder. Biopta sources bladder tissue several times a month, enabling us to assess your novel compounds for efficacy in normal or over-active bladder and bladder from patients suffering from neurogenic bladder disorders.

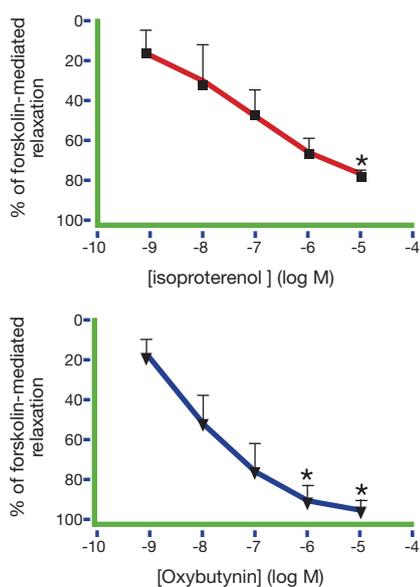


Figure 1: Reference compounds added cumulatively to isolated longitudinal human bladder muscle strips following pre-constriction with acetylcholine. (n = 3, p < 0.01 two-way ANOVA with Bonferroni post test when compared to vehicle control). All reference compound responses shown as % of maximum response to forskolin.

The Biopta Difference

- A customer focussed approach, delivering beyond your expectations.
- Scientific excellence with over 75 years combined experience in *in vitro* pharmacology and a technical team with the same high standards as yours.
- A flexible service; we support a cross-section of global clients, from small biotech to large pharmaceutical companies, providing both validated assays and tailored protocols.

Human Bladder:

Strips of isolated human bladder tissue are set up in organ baths for isometric force measurements, with or without nerve activation by electrical field stimulation.

- Protocols range from exploratory non-GLP screening through to full studies monitored for GLP compliance.
- Validated with a number of known reference compounds including oxybutynin (an anti-muscarinic used in the treatment of over-active bladder) and isoprenaline (isoproterenol). A full report is available on request.

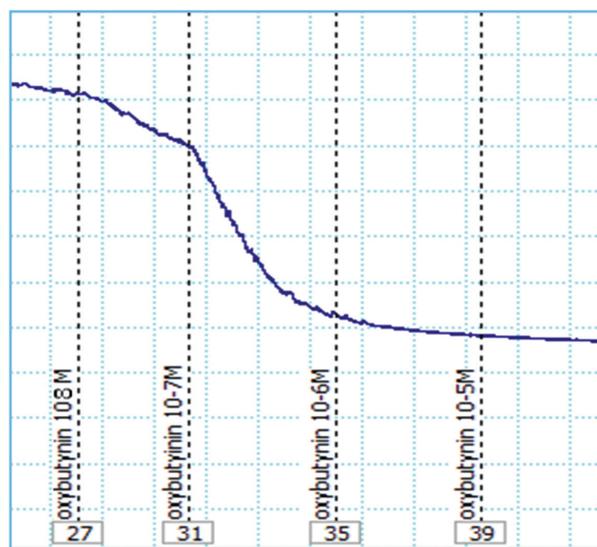


Figure 2: Raw data trace showing the effects of oxybutynin (10-8M to 10-5M) applied to human bladder strips pre-constricted with acetylcholine (10-6M).

- A quality service; with full GLP compliance.
- Our network of human tissue providers, with access to a wide range of fresh human tissues from both healthy and diseased patients on a daily basis.

For more information call: +44 (0)141 330 3831
or click on: www.biopta.com