

2024

FOR HEALTH CARE
PROFESSIONALS

*"Using this is as easy
as eating a treat, MEOW!"*



PetJet Brand Presentation

Meet the PetJet™

The Needle-free injection system for animals

PetJet™ is an innovative solution for administering medicines and vaccines to pets without using needles. The medication is pressurized and propelled through a tiny orifice, ensuring a painless and **needle-free experience**. This method allows efficient skin penetration and even distribution in the subcutaneous layer, enhancing treatment effectiveness.

By eliminating needles, PetJet reduces the risk of needle stick injuries and simplifies disposal. Research supports its efficacy, making it a significant advancement in veterinary care. Additionally, PetJet contributes to environmental well-being by avoiding medical waste and eliminating biohazardous sharps disposal concerns.



Product Description

*Needle-free injection for
subcutaneous drug administration to animals*



THE PETJET™ NEEDLE-FREE DELIVERY SYSTEM CONSISTS OF THREE COMPONENTS:

01. Injector

The re-usable injector is tested and approved for up to 5000 injections.

02. Nozzle

The re-usable nozzle can be filled with the prescribed medication prior to each injection. Each nozzle can be used for a maximum of 2 weeks and can be used for a single pet only.

03. Adaptors

Adaptors allow for the transfer of medicine from standard drug packagings into the nozzle. Adaptors are available in different sizes, to adaptor to vials and cartridges.

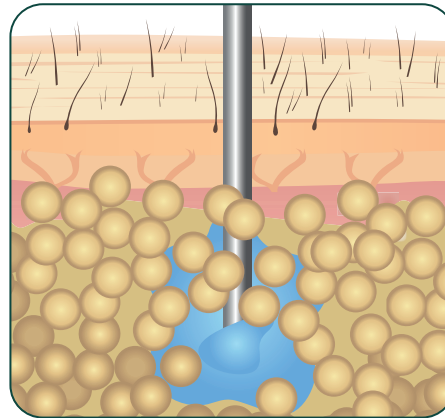
Needle-free Injection

Non-invasive delivery of medicines and vaccines

The working principle of needleless injections explained:

Liquid medication or vaccine penetrates the skin by being pushed at high pressure through a small opening in the nozzle.

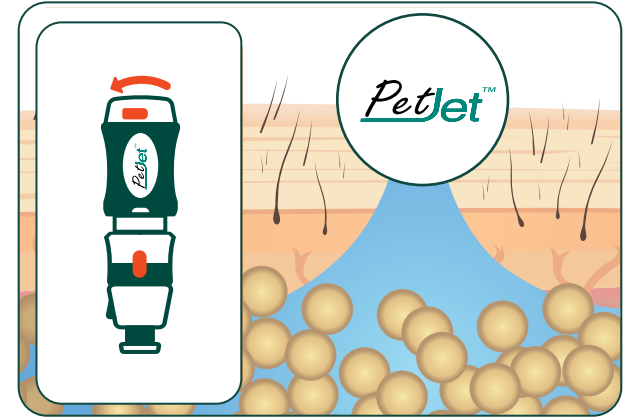
Once in subcutaneous tissue, the medication or vaccine follows a path of least resistance, which ensures excellent distribution of product and fast absorption.



Absorption speed 

Needle injection:

The medication or vaccine remains around the opening of the needle.



Absorption speed 

Needle-free injection:

The medication or vaccine penetrates the skin and spreads according to the path of least resistance.

Pet Benefits

04



More suitable for the treatment of pets that suffer from frequent needle injections

Pets with a needle-phobia no longer need to fear, nor feel the sting of a needle. This fear is also shared by many pet owners.



More rapid absorption and faster onset of action.

Needle-free injection is proven to result in faster absorption of various medicine including insulin. In humans, administration of insulin by jet injection **enhances insulin absorption.**



Absence of a needle is perceived as the biggest advantage of PetJet for the majority of the PetJet users and their pets.

Pet Benefits

05



Reduce the risk of needle stick injuries and cross contamination

The elimination of needle sharps helps reduce the occurrence of accidental needle stick injuries and cross contamination, making the PetJet™ safer to use and dispose of than conventional needles and syringes.



Reduce the risk of intramuscular injection

The PetJet targets the subcutaneous tissue just below the dermis reducing the chance of intramuscular injection. Intramuscular injections are commonly experienced as more painful and result in more frequent side effects such as swelling and inflammation at the injection site. With the PetJet, this can be avoided!



Environmentally Friendly



Reduce and simplify waste

Many medications are administered via single-use syringes, leading to significant medical waste. The disposal of used needle sharps in separate sharps containers complicates waste management. However, the PetJet system offers a reusable alternative that eliminates the need for sharps disposal containers. This not only reduces waste but also streamlines the process.



Each PetJet Nozzle can be used for **56 uses**, which saves 56 syringes or needles.



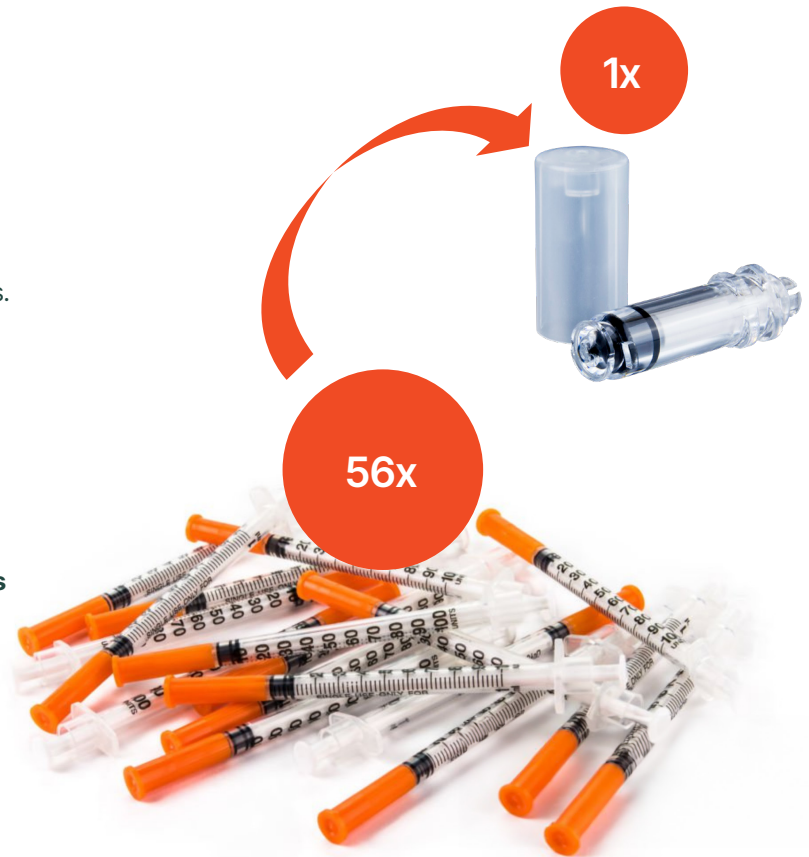
Each Injector can be used for **5000 injections**, or on average 3.5 years of use.



Used PetJet accessories can be discarded in regular household waste.



For each pet and their owner switching to the PetJet, an estimated **1000 needles** are taken from the market (and waste disposal) on an annual basis.



PetJet™ Models

07

The PetJet™ system offers two distinct models:

1. Insulin Injection Model (U-40 Insulin): Specifically designed for administering insulin, this model ensures precise dosing for U-40 insulin.

2. General Use Model (with mL Indication): Versatile and suitable for various applications, this model provides mL-based dosing for accurate administration.

U-40

Dose range: 1-25 units, 0.5-unit increments



ml

Dose range: 0.04-0.50 ml, 0.01 ml increments



Quick User Guide

08

OPERATING STEPS

Here we explain the operation of the PetJet in a few simple steps.

Prep Nozzle



Step 1 Open the Nozzle lock

Push the Nozzle Lock Switch upward. Turn the Nozzle Lock until the Switch points to the 'unlocked' position.



Step 2 Install the Nozzle

Firmly push the Nozzle into the Nozzle Lock. Once you have fully inserted the Nozzle, turn the Nozzle Lock until the Switch points to the 'locked' position.

Prep Using a 3ml Adaptor



Step 1 Slide the cartridge in the holder

Slide the cartridge in the holder with the cap on the top.



Step 2 Snap on the 3ml Adaptor

Snap on the 3ml Adaptor by pushing it firmly upon the holder with the inner needle facing downwards.

Certain medications such as insulin may require special preparation, refer to "Prepare your insulin" in the separate quick guide.

Prep Using a 10ml Adaptor



Step 1 Remove 10ml vial cap

Take the 10ml vial and remove any protective cap.



Step 2 Snap on the 10ml Adaptor

Snap on the 10ml adaptor by pushing it firmly upon the vial with the inner needle facing downwards.

Certain medications such as insulin may require special preparation, refer to "Prepare your insulin" in the separate quick guide.

Charge Injector



Step 1 Charge the device

Before each injection, the device needs to be charged.

Rotate the dosing grip (front) in the direction of the minus "-" arrow, while holding firing grip (back).

The amount of units or mL in the Dosage Window should decrease.



Step 2 Check the green indicator

Continue to rotate the front, until it will go no further. Note that a green mark will become visible in the Dosage Window and next to the safety release switch.

The PetJet™ is now charged.

Dose



Step 1 Connect the Adaptor

Align the Adaptor with the Nozzle and firmly rotate the Adaptor clockwise onto the Nozzle.



Step 2: Turn to the target dose + 2 clicks

Hold the device with the vial or cartridge upwards and the Dosage Window facing you.

Turn the front of the device in the direction of the plus "+" arrow until the target dose is visible in the Dosage Window.

Turn 2 extra clicks to compensate for possible air bubbles.



Step 3 Check for air

Disconnect the Adaptor from the Nozzle. Check the Nozzle for air bubbles.

To remove air, gently tap the back of the injector against a hard surface holding the injector upwards to allow air to collect at the Nozzle tip.



Step 4 Turn to the target dose

Flush any air out by dialing back to the target dose. You can do this by holding the back of the device while turning the front in the direction of the “-” arrow.

A drop of medication can be seen exiting the Nozzle .

Inject



Optional: Use a Comfort Ring

It is recommended to use a Comfort Ring, this helps to enlarge the surface of administration for more comfort.



Optional: Install the Comfort Ring

To install a Comfort Ring, hold the device by its front side and place the Comfort Ring on top of the Nozzle.



Step 1 Push the safety switch

Hold the device only by its back side, and push and hold the red safety release switch.



Step 2 Inject

Place the PetJet™ perpendicular (90°) to the pet's area of injection and push the device directly towards your pet to inject.

Testimonials

13



Dr. Nadeem Siddiqui

Department of Biochemistry, McGill University

"If anybody has an option between say a needle injection or a needle-free system. I think anybody would opt for the needle-free solution."

Fast uptake for active companions

Petjet™ innovative needle-free delivery avoids the negative association between needles and important, potentially life-saving treatment.

With insulins, needle-free injection is proven to result in a 40% faster insulin absorption resulting in a significantly faster onset of action. As a result, the body can access the energy it needs faster after meals. This is beneficial for controlling glucose levels and helps ensuring your pet can maintain a healthy and active lifestyle.

U-40

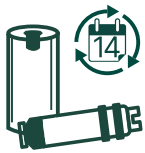
ml

"oh waaaa
that's fast!"



The PetJet™ Administration System

14



Re-usable Nozzle

The PetJet™ nozzle can be used up to 14 days, without compromising on injection performance.

5K

Re-usable injector

The injector is tested and approved for up to 5000 injections.



Accurate dosing system

An internal thread connection system is used for precise dosage setting.



Environmentally friendly

PetJet™ offers a sustainable alternative compared to single-use needles and their biohazardous waste.



Safety release system

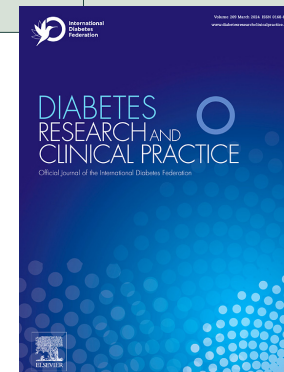
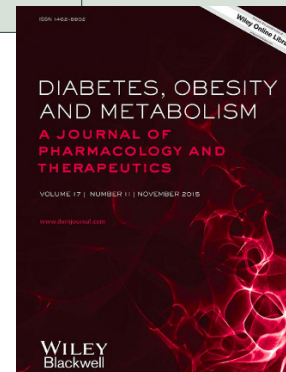
Two-step automatic release system: safe and easy.



PetJet™ Clinical Evidence

The PetJet is based on a needle-free device approved for human use but recalibrated to allow for the injection of medication for animal use. The following studies were published for human use. The device is produced with the same quality standards but is intended for animal use only.

YEAR	2011	2013	2015	2016
Study as published in academic journal	Improved Pharmacokinetic and Pharmacodynamic Profile of Rapid-Acting Insulin Using Needle-Free Jet Injection Technology	Needle-Free Jet Injection of Rapid-Acting Insulin Improves Early Postprandial Glucose Control in Patients with Diabetes Technology	Insulin Administered by Needle-Free Jet Injection Corrects Marked Hyperglycaemia Faster in Overweight or Obese Patients with Diabetes	A Comparison of the Pharmacodynamic Profiles of Jet-Injected Regular Human Insulin Versus Conventionally Administered Insulin Aspart in Healthy Volunteers
Conclusion	Administration of insulin aspart by jet injection enhances insulin absorption and reduces the duration of glucose-lowering action.		Overweight or obese patients typically have slower insulin absorption. Jet-injection can overcome this issue.	Administration of regular insulin with jet-injection is as fast as rapid acting insulin by conventional injection.





"Thank you!"



**For more information,
please contact:**



www.petjet.com
info@petjet.com



Europharma group BV
Euro Offices Building 3rd Floor
Beechavenue 127, 119 RB
Schiphol-Rijk, The Netherlands