

PRP Joint Injection

Reference Guidelines

Hip

- Primary landmark: Greater trochanter
- Joint space: Just cranial and proximal
- Limb placement: Slight abduction with distal traction applied
- Needle insertion: Perpendicular to skin and long axis of femur just proximal and cranial to trochanter
- To avoid iatrogenic damage to the sciatic nerve, joint should not be accessed from caudal to greater trochanter

Shoulder

- Primary landmark: Acromion
- Joint space: Distal
- Limb placement: Neutral position
- Needle insertion: Perpendicular to the limb or angled slightly proximal
- 1.5-in needle can reach the joint space in large breed dogs; for well-muscled or obese animals and giant breed dogs, a longer spinal needle may be required
- May be useful to observe acromion morphology on radiographs prior to injection

Elbow

- Primary landmark: Medial epicondyle
- Joint space: Approximately 1.5 cm to 2 cm distal and caudal
- Limb placement: Down with the opposite limb pulled back
- Needle insertion: Perpendicular limb and slightly cranial and proximal

Carpus

- Primary landmarks: Radius and carpus
- Joint space: Just medial (most common) or lateral to cephalic vein and common digital extensor tendon running across joint
- Limb placement: Carpus should be positioned in full flexion to gain proper access to the joint
- Needle insertion: Dorsal to palmar parallel to the joint surface
- Palpate distal radius and flex and extend carpus to locate the joint space; holding joint in some flexion (typically approximately 45°) helps

Stifle

- Patient position: Lateral recumbency with affected limb up or dorsal recumbency in a trough
- Primary landmark: Patella and tibial tuberosity
- Joint space: Distal
- Needle insertion: Parallel to the tibial plateau, approximately 1/3 to 1/2 distance from patella to tibial tuberosity either medial or lateral to patellar tendon
- Insertion angle will vary upon tibial plateau angle and should be assessed on radiographs prior to injection
- Flex joint to approximately 90° in lateral recumbency by having an assistant flex stifle, abduct limb, place foot on table

Tarsus

- Primary landmarks: Tibia, talus, malleolus (distal fibula)
- Joint space: Lateral and medial, both cranial and caudally
 - Dorsally, distal to tibia and proximal to talus, either lateral or medial to saphenous vein and extensor tendons
 - Caudally and laterally, distal to lateral malleolus angling from caudodistal to cranioproximal and distalateral to proximomedial
- Limb placement: Down and the opposite limb pulled back
- Needle insertion: Perpendicular limb and slightly cranial and proximal
- Flexing and extending the hock helps to identify the joint space

Needle Size for Average Large Breed Dog

Joint	Needle Size
Shoulder	20 g, 1.5 in Hypodermic Needle / 2 in Spinal Needle
Elbow	20 g, 1.5 in Hypodermic Needle
Carpus	20 g, 1 in Hypodermic Needle
Hip	20 g, 2-3 in Spinal Needle
Stifle	20 g, 1.5 in Hypodermic Needle
Tarsus	20 g, 1 in Hypodermic Needle

Needle Size for Average Small Breed Dog

Joint	Needle Size
Shoulder	22 g, 1.5 in Hypodermic Needle
Elbow	22 g, 1.5 in Hypodermic Needle
Carpus	25 g, 1 in Hypodermic Needle
Hip	20 g, 1.5 in Hypodermic Needle / 2 in Spinal Needle
Stifle	22 g, 1 in Hypodermic Needle
Tarsus	25 g, 0.5 in or 1 in Hypodermic Needle

Maximum Allowable Blood Volume Draw for Canines

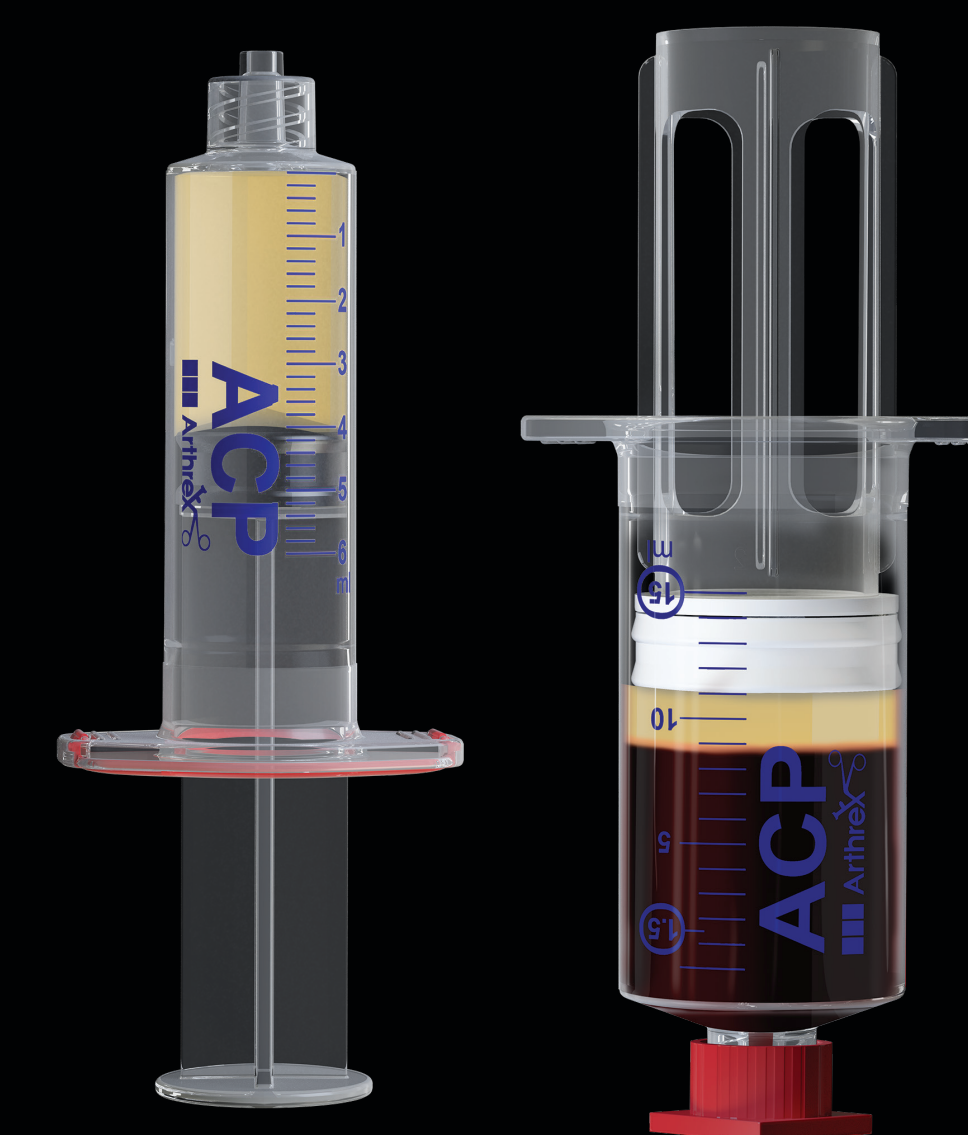
Weight (lb)	Weight (kg)	Maximum blood draw volume (mL)
5	2.3	30
10	4.5	60
15	6.8	90
20	9.1	120
25	11.3	150
30	13.6	180
35	15.9	210
40	18.1	240
45	20.4	270
50	22.7	300
55	24.9	330
60	27.2	360

Maximum Allowable Blood Volume Draw for Felines

Weight (lb)	Weight (kg)	Maximum blood draw volume (mL)
2.5	1.1	12
3	1.4	18
3.5	1.6	22
4	1.8	25
4.5	2	28
5	2.3	30
5.5	2.5	35
6	2.7	38
6.5	2.9	42
7	3.2	45
7.5	3.4	48
8	3.6	50

PRP Volumes to Inject (≤ mL)

	Weight (kg)	Shoulder	Elbow	Carpus	Hip	Stifle	Tarsus
Toy/Cat	5	0.5 mL	0.25-0.5 mL	0.25 mL	0.5 mL	0.5 mL	0.25 mL
Small	5-10	0.5-1 mL	0.5-1 mL	0.25-0.5 mL	0.5-1 mL	0.5-1 mL	0.25-0.5 mL
Medium	10-20	1-1.5 mL	1-1.5 mL	0.25-1 mL	1-1.5 mL	1-1.5 mL	0.25-1 mL
Large	20-50	1.5-2 mL	1.5-2 mL	0.75-1 mL	1.5-2 mL	1.5-2 mL	0.75-1 mL
Giant	50+	2-3 mL	2-2.25 mL	1 mL	2-3 mL	2-3 mL	1 mL



Learn more about
PRP joint injection
best practices

