**S1: Description of APV infected pigeon flocks investigated in this study**

| **History &clinical examination\*** | **Date of collection** | **Age/No** | **Breeding** | **Flock No** |
| --- | --- | --- | --- | --- |
| Yellow nodules scattered all over the head, margin of the eye and the eyelids. | 10/2016 | 1m/40 | Backyard | 1- |
| Scabs and vesicles on the head, wings, thigh and feet. | 10/2016 | 2w/50 | Backyard | 2- |
| Nodular lesions scattered all over the body even the feathered parts. | 10/2016 | 1m/25 | Backyard | 3- |
| Small number of nodules on the head, margin of eye and peak. | 10/2016 | 2w/20 | Backyard | 4- |
| Yellow small size nodular lesions only on the head of the bird. | 10/2016 | 1m/35 | Backyard | 5- |
| Vesicles and scabs on the head, under the wings and the feet. | 10/2016 | 7d/65 | Backyard | 6- |
| Large number of yellow scab on the head, eyes, nostrils and margin of the beak. | 10/2016 | 3w/75 | Backyard | 7- |
| Nodular lesions all over the feathered and unfeathered parts of the body including vent and feet. | 11/2016 | 2w/100 | Backyard | 8- |
| Huge number of nodules on the head, around the eyes, nose and the beak. | 11/2016 | 10d/60 | Backyard | 9- |
| Scabs of vesicles and pustules on the head, back and under the wings. | 5/2017 | 3w/40 | Backyard | 10- |
| Small number of nodules around the eyes and on the eye lids. | 5/2017 | 1m/45 | Backyard | 11- |
| Nodular lesions scattered all over the body (head, back, above &under the wings, vent and the feet). | 5/2017 | 1m/30 | Backyard | 12- |
| Yellow nodular lesions on the head and all over the body. | 5/2017 | 3w/50 | Backyard | 13- |
| Small number of nodular lesions, large in size at the corner of the beak. | 5/2017 | 3w/40 | Backyard | 14- |
| Two to three small size nodules present on the head. | 5/2017 | 2w/30 | Backyard | 15- |
| Large number of nodular lesions on the head, wings and all over the body. | 5/2017 | 3w/45 | Backyard | 16- |
| Scabs of vesicles and pustules on the head and feathered parts of the wings. | 5/2017 | 1w/50 | Backyard | 17- |
| Yellow nodular lesions scattered all over the body | 6/2017 | 2w/75 | Backyard | 18- |
| Vesicles and pustules on the head and the feathered parts of the wings. | 6/2017 | 3w/40 | Backyard | 19- |
| Small number of nodules on the head and around the beak. | 6/2017 | 1m/35 | Backyard | 20- |
| Large number of nodular lesions all over the head, wings, body and feet. | 6/2017 | 2w/45 | Backyard | 21- |
| Yellow vesicles and pustules on the head, under the wings, vent and feet. | 6/2017 | 1m/100 | Backyard | 22- |
| Nodular lesions of vesicles and pustules on the head and the feathered parts of the wings. | 7/2017 | 3w/500 | tower | 23- |
| One large size nodule on the corner of the beak.  | 7/2017 | 35d/1000 | tower | 24- |
| Two to three large size nodules on the head and margin of the beak.  | 7/2017 | 1m/300 | tower | 25- |
| Small two yellow nodules on both corners of the beak. | 7/2017 | 1m/800 | tower | 26- |
| Large number of nodular lesions on the head and covered most of the body and feet. | 7/2017 | 1m/80 | Backyard | 27- |
| Yellow and haemorrhagic vesicles and pustules closed the eyes completely. | 7/2017 | 2w/150 | Backyard | 28- |
| Nodular lesions all over the head and feet. | 7/2017 | 3w/30 | Backyard | 29- |
| Huge number of nodular lesions around the eyes, nostrils and above& at the corner of the beak. | 7/2017 | 1m/60 | Backyard | 30- |
| Vesicles and pustules on the head, nostrils and beak.  | 7/2017 | 3w/55 | Backyard | 31- |
| Scabs, vesicles and pustules all over the head and feet. | 7/2017 | 10d/75 | Backyard | 32- |
| Nodular lesions all over the head, under the wings, vent and feet. | 7/2017 | 40d/60 | Backyard | 33- |
| Large number of small nodular lesions all over the head. | 7/2017 | 1m/45 | Backyard | 34- |
| One large size nodule closed the eye. | 7/2017 | 20d/50 | Backyard | 35- |
| Scabs of vesicles and pustules on the head and above the beak.  | 7/2017 | 35d/40 | Backyard | 36- |
| The head appear as a one nodule due to huge number & large size vesicles and pustules.  | 7/2017 | 1m/100 | Backyard | 37- |
| Small number of nodules on the head.  | 7/2017 | 50d/30 | Backyard | 38- |
| Nodular lesions around the eyes and above the beak. | 7/2017 | 10d/50 | Backyard | 39- |
| Nodular lesions on the head back and under the wings.  | 8/2017 | 25d/100 | Backyard | 40- |
| Small number of nodular lesions only on the beak.  | 8/2017 | 1m/30 | Backyard | 41- |
| Large size vesicles and pustules on the head and all over the body.  | 8/2017 | 3w/25 | Backyard | 42- |
| Three to four vesicles and pustules around one eye and above& at the corner of the beak. | 8/2017 | 40d/1000 | Backyard | 43- |
| Nodular lesions around the eyes and the beak.  | 8/2017 | 55d/60 | Backyard | 44- |
| Huge number of nodular lesions all over the head and body (feathered & un feathered parts).  | 8/2017 | 2w/35 | Backyard | 45- |
| Few and small size Nodules around the eyes. | 8/2017 | 1m/80 | Backyard | 46- |
| Large size vesicles and pustules restricted on the head only.  | 8/2017 | 50d/70 | Backyard | 47- |
| Small number and size nodular lesions all over the body. | 8/2017 | 2w/30 | Backyard | 48- |
| One large Nodule above the eye.  | 8/2017 | 10d/25 | Backyard | 49- |
| Large size nodular lesions on the head and neck.  | 8/2017 | 40d/60 | Backyard | 50- |
| Small number, small size nodular lesions all over the head. | 8/2017 | 2m/40 | Backyard | 51- |
| Yellow haemorrhagic large nodular lesions on the head, around the eyes and beak. | 8/2017 | 3w/56 | Backyard | 52- |
| Yellow large size vesicles and pustules restricted above the eyes and beak.  | 9/2017 | 35d/80 | Backyard | 53- |
| Yellow large number small size nodules all over the head and feet.  | 9/2017 | 1m/55 | Backyard | 54- |
| Small size nodules on the head and around the eyes.  | 9/2017 | 3w/45 | Backyard | 55- |
| Nodular lesions scattered all over the head and feathered parts of wings.  | 9/2017 | 3w/66 | Backyard | 56- |
| Yellow large vesicles and pustules closed both eyes and above the beak. | 9/2017 | 12d/28 | Backyard | 57- |
| Scabs of vesicles and pustules all over the head and wings.  | 9/2017 | 10d/70 | Backyard | 58- |
| Large size nodules on the head, behind the neck, back and feathered parts of wings.  | 9/2017 | 55d/30 | Backyard | 59- |
| Nodular lesions of vesicles and pustules closed the eyes and under the beak.  | 9/2017 | 2m/100 | Backyard | 60- |
| Small number and size nodular lesions scattered on the head, around the eyes and beak.  | 9/2017 | 3w/40 | Backyard | 61- |
| Nodular lesions all over the head, neck, back vent, under the wings and feet. | 9/2017 | 10d/45 | Backyard | 62- |
| Yellow large size vesicles and pustules forming mass around the eyes, eye lids, above the beak and feet.  | 10/2017 | 28d/75 | Backyard | 63- |
| Large size yellow nodules all over the head and feet.  | 10/2017 | 1m/60 | Backyard | 64- |
| Large number of nodular lesions of vesicles and pustules on the head, around eyes, beak and inner side of the wings.  | 10/2017 | 12d/40 | Backyard | 65- |
| Varies size Nodular lesions all over the head and feet.  | 10/2017 | 3w/45 | Backyard | 66- |
| Yellow large size vesicles and pustules restricted around the beak and eyes.  | 10/2017 | 1m/64 | Backyard | 67- |
| Nodular lesions of varies size all over the head and feet.  | 10/2017 | 25d/50 | Backyard | 68- |
| Yellow scab all over the head, wings, back and vent.  | 10/2017 | 35d/70 | Backyard | 69- |
| Vesicles and pustules of large size on the head, neck and wings.  | 10/2017 | 2w/60 | Backyard | 70- |
| Yellow few vesicles and pustules only around the eyes.  | 11/2017 | 1m/300 | tower | 71- |
| Small size nodules restricted around the beak and eyes.  | 11/2017 | 3w/800 | tower | 72- |
| Large mass nodule above one eye. | 11/2017 | 40d/250 | tower | 73- |
| Small size nodules around the eyes. | 11/2017 | 2w/300 | tower | 74- |
| Yellow vesicles around the eyes and corner of the beak. | 11/2017 | 1m/600 | tower | 75- |

\*All the samples obtained from non-vaccinated birds

d=day, w=week & m=month

**S2: Description of APV chicken flocks investigated in this study**

| **History & clinical examination** | **Date of collection** | **Vaccination/Age** | **Age/No** | **Breeding system** | **Breed** | **Flock No** |
| --- | --- | --- | --- | --- | --- | --- |
| Wart like nodules scattered on the comb and wattles. | 10/2016 | No/- | 4m/20 | Backyard  | Native  | 1- |
| Dark scabs around the eyes and at the corner of the beak.  | 10/2016 | No/- | 70d/15 | Backyard  | SASSO | 2- |
| Large size nodules scattered on the head, comb, wattles and feet.  | 10/2016 | No/- | 3m/10 | Backyard  | SASSO | 3- |
| Blackish scabs on the tips of the comb, corner of eyes, and wattles.  | 12/2016 | No/- | 55d/20 | Backyard | Native  | 4- |
| Wart like nodules only on the tips of the comb.  | 5/2017 | No/- | 60d/5000 | Commercial | SASSO | 5- |
| Small size yellow to brown scabs scattered on the comb and wattles.  | 5/2017 | No/- | 66d/3000 | Commercial | SASSO | 6- |
| Large size wart like nodules on the head and at the corner of the beak.  | 11/2016 | No/- | 50d/2500 | Commercial | Native  | 7- |
| Two large size nodules behind the eyes, nostrils and on the ears.  | 5/2017 | Yes/ 50d | 80d/5000 | Commercial | Hy-line | 8- |
| Blackish scabs on the eyelids, corner of eyes and beak.  | 6/2017 | No/- | 62d/5000 | Commercial | Hy-line | 9- |
| Large size wart like nodules closing the eyes and all over the comb and wattles.  | 6/2017 | Yes/ 55d | 70d/5000 | Commercial | SASSO | 10- |
| Wart like nodules on the head and few on the comb & wattles and feet.  | 6/2017 | No/- | 45d/25 | Backyard  | Native  | 11- |
| One large wart like nodule at the corner of the beak.  | 6/2017 | No/- | 55d/2500 | Commercial | Native  | 12- |
| Thick dark scabs forming a mass on the comb and wattles. | 7/2017 | No/- | 60d/5000 | Commercial | Lohman | 13- |
| Wart like nodules above the eyes and at the corner of the beak. | 7/2017 | No/- | 65d/3000 | Commercial | Lohman | 14- |
| Blackish scabs around the eyes, beak, nostrils and the comb. | 7/2017 | Yes/ 55 days | 70d/7000 | Commercial | Lohman | 15- |
| Only one large size wart like nodule at the corner of the beak.  | 7/2017 | No/- | 63d/5000 | Commercial | Native  | 16- |
| Large number of nodular lesions on comb and wattles.  | 7/2017 | No/- | 55d/2500 | Commercial | Native  | 17- |
| Nodular lesions of large size on the head, comb and wattles.  | 7/2017 | Yes/ 50 days | 80d/6000 | Commercial | Lohman | 18- |
| Wart like nodules on the eyelids, at the corner of the beak and the comb.  | 7/2017 | No/- | 65d/3000 | Commercial | SASSO | 19- |
| Few number of wart like nodules on the comb and wattles.  | 7/2017 | No/- | 55d/3000 | Commercial | SASSO | 20- |
| Scabs, brown to black in colour scattered all over the comb and wattles.  | 7/2017 | Yes/ 55d | 70d/5000 | Commercial | Hy-line | 21- |
| Wart like nodules above the eyes (closing the eyes), nostrils and at the corner of the beak.  | 7/2017 | Yes/ 55d | 66d/5000 | Commercial | Hy-line | 22- |
| Scabs of yellow to brown in colour on the head, comb and wattles.  | 7/2017 | No/- | 50d/7000 | Commercial | H&N | 23- |
| Blackish scabs scattered all over the head, comb and wattles. | 7/2017 | No/- | 40d/20 | Backyard | Native | 24- |
| Large number of wart like nodules forming a mass on the comb and wattles. | 7/2017 | Yes/ 40d | 60d/7000 | Commercial | H&N | 25- |
| Wart like nodules on the head, comb and wattles also, a diphtheritic membrane on on the tongue is present. the tongue is present.  | 8/2017 | No/- | 50d/5000 | Commercial | Lohman | 26- |
| Few number of scabs around the eyes and at the corner of the beak.  | 8/2017 | Yes/ 50d | 70d/2500 | Commercial | Lohman | 27- |
| One large size wart like nodule at the corner of the eye.  | 8/2017 | No/- | 50d/3000 | Commercial | Lohman | 28- |
| Blackish scabs on the comb, corner of eyes &beak and wattles.  | 8/2017 | No/- | 65d/5000 | Commercial | Hy-line | 29- |
| Few numbers of scabs blackish in colour on the head and the comb.  | 8/2017 | No/- | 50d/2500 | Commercial | Balady | 30- |
| Large number of nodular lesions on the head, comb and wattles.  | 8/2017 | No/- | 55d/2500 | Commercial | Balady | 31- |
| Two to three wart like nodules on the head and above the beak.  | 9/2017 | Yes/ 55d | 60d/6000 | Commercial | Hy-line | 32- |
| Blackish scabs on the eyelids, corner of eyes, beak, nostrils and comb & wattles.  | 9/2017 | Yes/ 40d | 60d/8000 | Commercial | H&N | 33- |
| Yellowish scabs on the head, comb and wattles.  | 10/2017 | No/- | 50d/7000 | Commercial | H&N | 34- |
| Small size nodular lesions all over the comb and wattles.  | 10/2017 | Yes/ 55d | 70d/5000 | Commercial | Hy-line | 35- |

d=day, w=week & m=month

**S3: Description of APV turkey flocks investigated in this study**

| **History & clinical examination** | **Date of collection** | **Vaccination/Age** | **Age/No** | **Breeding system** | **Breed** | **Flock No** |
| --- | --- | --- | --- | --- | --- | --- |
| Scabs on the head, neck, legs and feet. | 6/2017 | No/- | 3m/50 | Backyard  | Native breed | 1- |
|  Large number of nodules around the eyes and above the beak.  | 6/2017 | Yes/37d | 55d/3000 | Commercial | XL | 2- |
| Scab brown & black in colour at the corner of the eyes and margin of the beak.  | 7/2017 | Yes/50d | 62d/1500 | Commercial | Grand maker | 3- |
| Huge number of scabs all over the head and neck. | 7/2017 | Yes/45d | 54d/1000 | Commercial | B6 foreign | 4- |
| Scabs on the head especially on the eyes and neck.  | 7/2017 | Yes/55d | 72d/1500 | Commercial | XL | 5- |
| Large number of nodule all over the head and neck.  | 7/2017 | No/- | 40d/30 | Backyard  | Native  | 6- |
| Brown to black colour scabs around the eyes and beak.  | 7/2017 | No/- | 65d/40 | Backyard  | Native | 7- |
| Scabs all over the head, neck and feet.  | 7/2017 | Yes/40d | 62d/3000 | Commercial | Grand maker | 8- |
| Scabs restricted on the eyes closing it and the beak.  | 7/2017 | Yes/37d | 55d/1500 | Commercial | Grand maker | 9- |
| Large number of nodule all over the head, neck, legs and feet.  | 7/2017 | Yes/40d | 63d/3000 | Commercial | Grand maker | 10- |
| Scabs on the head, neck and feathered parts of the wings.  | 7/2017 | Yes/45d | 70d/1500 | Commercial | B6 foreign | 11- |
| Wart like nodules scattered all over the head and neck.  | 8/2017 | Yes/40d | 64d/3000 | Commercial | Grand maker | 12- |
| Large number of blackish scabs around the eyes, ears, nostrils and the beak.  | 8/2017 | Yes/37d | 46d/1500 | Commercial | Grand maker | 13- |
| Wart like nodules of large size on the head and neck.  | 8/2017 | Yes/50d | 72d/3000 | Commercial | XL | 14- |
| Nodular lesions scattered all over the head, neck and feathered parts of the wings. | 8/2017 | Yes/45d | 65d/1500 | Commercial | XL | 15- |
| Blackish scabs on the head, neck, feathered parts of wings, legs and feet.  | 8/2017 | Yes/40d | 57d/3000 | Commercial | B6 foreign | 16- |
| Huge number of wart like nodules all over the head and neck.  | 8/2017 | No/- | 3m/100 | Backyard  | Native breed | 17- |
| Nodular lesions of large size all over the head, closing the eyes and neck.  | 9/2017 | No/- | 70d/35 | Backyard  | Native breed | 18- |
| Large number of brown to blackish scabs around the eyes, beak, neck and feathered parts of the wings.  | 9/2017 | Yes/42d | 46d/3000 | Commercial | XL | 19- |
| Wart like nodule restricted around the eyes and the beak.  | 9/2017 | Yes/42d | 60d/3000 | Commercial | XL | 20- |
| Large number of nodular lesions all over the head and neck.  | 9/2017 | Yes/40d | 48d/1500 | Commercial | B6 foreign | 21- |
| Nodular lesions on the head, neck and feathered parts of the wings. | 9/2017 | Yes/37d | 66d/1500 | Commercial | B6 foreign | 22- |
| Wart like nodules scattered all over the head, neck and feathered parts of the wings. | 9/2017 | Yes/40d | 52d/1500 | Commercial | Grand maker | 23- |
| Scabs of blackish colour on the head, neck, feathered parts of wings, legs and feet. | 9/2017 | Yes/45d | 60d/3000 | Commercial | Grand maker | 24- |
| Large number of nodular lesions around the eyes, above the beak and neck.  | 9/2017 | Yes/42d | 50d/3000 | Commercial | XL | 25- |
| Brownish scabs on the head, neck and feathered parts of the wings.  | 9/2017 | Yes/ 50d | 62d/3000 | Commercial | B6 foreign | 26- |

d=day, w=week & m=month

**S4: Details of reference APV strains used for the phylogenetic analysis**

|  |  |  |  |
| --- | --- | --- | --- |
| **Accession number** | **Host** | **Abbreviation**  |  **Strain name** |
| **DNA Polymerase** | **fpv140** | **fpv167** |  |  |  |
| - | AJ581527 | AJ581527 | Chicken | FWPVFP9 | FowlpoxHP1-444 (FP9) |
| - | AM071393 | AM050377 | Chicken | FWPV174 | 174/4/04 |
| - | AM071395 | AM050380 | Chicken | FWPVD | DiftosecCT (Merial) |
| - | AM071394 | AM050379 | Chicken | FWPVN | NobilisVarioleW (Intervet) |
| - | - | GU108506 | Chicken | FWPVAT\_Riedling | AT\_Reidling/68/7/ 2008 |
| - | - | AY530302 | Chicken | FWPVHPB | HP-B |
| - | AM071512 | AM050375 | Canary | CNPV1445 | Canarypox1445/97/33 |
| - | - | AM050384 | Canary | CNPV |  (Duphar; FortDodge) |
| - | AM071389 | AM050385 | Pigeon | PGPVP | Pigeonpox Peekham19/11/75 |
| - | - | AY530303 | Pigeon | PGPVTP-2 | TP-2 |
| - | - | AY453177 | Pigeon | PGPVB7 | B7 |
| - | - | DQ873811 | Pigeon | PGPVIndia\_2006 | India\_2006 |
| - | HM481417 | HM481409 | Pigeon | PGPVIndia\_08\_2009 | India\_08\_2009 |
| - | - | AM050386 | Pigeon | PGPV950 | CVL950 |
| - | AM071390 | AM050387 | Turkey | TKPV66 | Turkeypox2/11/66 |
| - | AM071391 | AM050388 | Turkey | TKPV98 | 10/12/98 |
| - | FR852587 | FR852585 | Turkey | FWPVPA10\_14263 | PA10-14263 |
| - | - | AY530304 | Turkey | TKPV13401 | GB 134/01 |
| - | AM071511 | AM050389 | Sparrow | SRPV9037 | Sparrowpox9037 31/5/66 |
| - | AM071510 | AM050390 | Sparrow | SRPV23 | CVL/23 |
| - | - | HM481407 | Sparrow | SRPV06 | 2009/ India/06 |
| - | - | AY530307 | Sparrow | SRPVDD1258 | DD1258 |
| - | - | AY530308 | Sparrow | SRPV32002 | GB 320/02 |
| - | - | AM050391 | Starling | SLPV | Starlingpox/27 |
| - | - | AM050381 | Houbara bustard | HOPV1252 | Houbarapox1252/98/42 |
| - | AM071513 | - | Houbara bustard | HOPV1165 | Houbarapox1165/04 |
| - | - | AM050382 | Macaw | MCPV | Macawpox1305/86 |
| - | - | AM050383 | Parrot | PRPV | Parrotpox364/89 |
| - | AM071515 | AM050376 | Falcon | FLPV1381 | Falconpox1381/96 |
| - | - | AY530306 | Falcon | FLPV36202 | GB362-02 |
| - | AM071388 | AM050392 | Black-browed albatross | ABPV | Albatrosspox353/87 |
| - | HM481411 | HM481403 | Golden pheasant | FWPV2008\_India\_02 | 2008/India/02 |
| - | HM481414 | HM481406 | Silver pheasant | FWPV2008\_India\_05 | 2008/India/05 |
| - | FJ948106 | FJ948105 | Penguin | PEPV | San92 |
| - | - | AY530305 | Ostrich | OSPV | GB 724/01-20 |
| - | - | AY530311 | Agapornis | AGPV | APIII |
| - | - | AY453175 | Great tit | GTPV-256 | GTPV-256 |
| - | - | AY453173 | Great tit | GTPVA310 | GTPV-A310 |
| - | - | AY453174 | Great tit | GTPVA311 | GTPV-A311 |
| - | - | AY530310 | Stone curlew | SCPV18298 | GB 182/98 |
| - | KC821580 | KC821556 | Juvenileracing pigeon (Columba liviadomestica) | Pi2 | (PGPVOPi2) |
| - | KC821573 | GU204249 | Flamingo (Phoenicopterus minor) | FGPV | FGPV-KD09/ ZAF |
| - | KC821583 | KC821559 | Rockpigeon (Columba guinea) | RP2 | PGPV93KRP2 |
| - | KC821578 | KC821554 | Laughingdove (Spilopelia senegalensis) | LD2 | PGPV11KLD2 |
| - | KC821576 | KC821552 | Racingpigeon (Columbalivia domestica) | Pi5 | PGPV11KPi5 |
| - | KC821575 | KC821551 | Feralpigeon (Columbalivia) | FP2 | PGPV11KFP2 |
| - | KC821577 | KC821553 | Laughingdove (Spilopelia senegalensis( | LD1 | PGPV10KLD1 |
| - | KC821574 | KC821550 | Feralpigeon (Columbalivia( | FP1 | PGPV11KFP1 |
| - | KC821582 | KC821558 | Rockpigeon (Columbaguinea( | RP1 | PGPV10KRP1 |
| - | AJ581527 | AJ581527 | Chicken | FWPVFPV9 | HP1-444 (FP9) |
| - | JX464822 | JQ665838 | Chicken | Elsharqyia\_FWPV1 | Elsharqyia\_FWPV1 |
| - | JX464823 | JX464819 | Chicken | Elsharqyia\_FWPV2 | Elsharqyia\_FWPV2 |
| - | JX464824 | JX464820 | Chicken | Elsharqyia\_FWPV3 | Elsharqyia\_FWPV3 |
| - | JX464825 | JX464821 | Chicken | Elsharqyia\_FWPV4 | Elsharqyia\_FWPV4 |
| - | JX464826 | JQ665839 | Turkey | Elsharqyia\_TKPV | Elsharqyia\_TKPV |
| - | JX464827 | JQ665840 | Pigeon | Elsharqyia\_PGPV | Elsharqyia\_PGPV |
| - | KF955996.1 | - | Chicken | OKr-2014 | K141 |
| - | - | KP987207 | Chicken | NGA\_VRD09\_172 | NGA\_VRD09\_172 |
| - | - | KP987209 | Chicken | NGA\_VRD09\_273 | NGA\_VRD09\_273 |
| - | - | KP987208 | Chicken | NGA\_FPVV\_03\_2012 | NGA\_FPVV\_03\_12 |
| NC\_002188 | - | - | Chicken | NC\_002188/fowlpox virus | NC\_002188/fowlpox virus |
| KJ801920 | - | - | Pigeon | KJ801920/Fep2 | Pigeonpox virus isolate FeP2 |
| KJ859677 | - | - | Penguin | PEPV | Penguinpox virus isolate PSan92 |
| KM281933 | - | - | domestic mallard ducks | KM281933 XL | Avipoxvirus MZ-2014 isolate XL |
| KM281934 | - | - | domestic mallard ducks | KM281934.1 TD | Avipoxvirus MZ-2014 isolate TD |
| NC\_005309 | - | - | Canary | NC\_005309/CNPV | Canarypoxvirus |
| KC017850 | - | - | Domestic fowl | P1 | Hungary isolate P1 |
| KC017866 | - | - | Domestic turkey | P2 | Nevada isolate P2 |
| KC017867 | - | - | Domestic fowl | P3 | Hawaii isolate P3 |
| KC017851 | - | - | Blue-eared pheasant | P5 | Hungary isolate P5 |
| KC017885 | - | - | Rock dove | P7 | Georgia isolate P7 |
| KC017852 | - | - | Eastern imperial eagle | P8 | Hungary isolate P8 |
| KC017853 | - | - | Rock dove | P9 | Hungary isolate P9 |
| KC017854 | - | - | Rock dove | P10 | Hungary isolate P10 |
| KC017855 | - | - | Great bustard | P11 | Hungary isolate P11 |
| KC017893 | - | - | Red kite | P19 | Spain isolate P19 |
| KC017898 | - | - | Southern giant petrel | P22 | Antarctica isolate P22 |
| KC017899 | - | - | Pelagic cormorant | P23 | Alaska isolate P23 |
| KC017888 | - | - | Eurasian eagle owl | P24 | South Korea isolate P24 |
| KC017902 | - | - | Common murre | P26 | Washington isolate P26 |
| KC017904 | - | - | Laysan albatross | P27 | Midway Islands isolate P27 |
| KC017905 | - | - | Magellanic penguin | P28 | Argentina isolate P28 |
| KC017858 | - | - | Peregrine falcon | P29 | Hungary isolate P29 |
| KC017859 | - | - | Red-footed falcon | P30 | Hungary isolate P30 |
| KC017906 | - | - | Trumpeter swan | P31 | Wisconsin isolate P31 |
| KC017920 | - | - | Mottled duck | P32 | Texas isolate P32 |
| KC017907 | - | - | Blue-winged teal | P33 | Wisconsin isolate P33 |
| KC017908 | - | - | Redhead duck | P34 | Wisconsin isolate P34 |
| KC017924 | - | - | Mallard duck | P35 | New York isolate P35 |
| KC017909 | - | - | Trumpeter swan | P36 | Wisconsin isolate P36 |
| KC017910 | - | - | Wood duck | P37 | Wisconsin isolate P37 |
| KC017926 | - | - | Mourning dove | P38 | Illinois isolate P38 |
| KC017928 | - | - | Mourning dove | P39 | California isolate P39 |
| KC017911 | - | - | Mourning dove | P40 | Wisconsin isolate P40 |
| KC017912 | - | - | Mourning dove | P41 | Wisconsin isolate P41 |
| KC017929 | - | - | Rock dove | P42 | California isolate P42 |
| KC017913 | - | - | Canada goose | P43 | Wisconsin isolate P43 |
| KC017932 | - | - | Bald eagle | P44 | Florida isolate P44 |
| KC017933 | - | - | Bald eagle | P45 | Florida isolate P45 |
| KC017935 | - | - | Bald eagle | P46 | Minnesota isolate P46 |
| KC017914 | - | - | Red-tailed hawk | P47 | Wisconsin isolate P47 |
| KC017934 | - | - | Bald eagle | P48 | Florida isolate P48 |
| KC017900 | - | - | Bald eagle | P52 | Alaska isolate P52 |
| KC017901 | - | - | Bald eagle | P53 | Alaska isolate P53 |
| KC017915 | - | - | Mallard duck | P54 | Wisconsin isolate P54 |
| KC017869 | - | - | Canary | P55 | Hawaii isolate P55 |
| KC017870 | - | - | Canary | P56 | Hawaii isolate P56 |
| KC017871 | - | - | Canary | P57 | Hawaii isolate P57 |
| KC017872 | - | - | Canary | P58 | Hawaii isolate P58 |
| KC017873 | - | - | Apapane | P59 | Hawaii isolate P59 |
| KC017945 | - | - | Americancrow | P72 | Washington,DC isolate P72 |
| KC017877 | - | - | House ﬁnch | P73 | Hawaii isolate P73 |
| KC017946 | - | - | Medium ground ﬁnch | P74 | Galapagos Islands isolate P74 |
| KC017941 | - | - | Northern(masked) bobwhite | P76 | Arizona isolate P76 |
| KC017950 | - | - | Americancrow | P77 | Massachusetts isolate P77 |
| KC017951 | - | - | Black-billed magpie | P78 | Colorado isolate P78 |
| KC017952 | - | - | Black-hooded siskin | P79 | The Netherlands isolate P79 |
| KC017953 | - | - | American crow | P81 | Maryland isolate P81 |
| KC017931 | - | - | Common murre | P82 | California isolate P82 |
| KC017948 | - | - | Medium ground ﬁnch | P83 | Galapagos Islands isolate P83 |
| KC017949 | - | - | Woodpecker ﬁnch | P84 | Galapagos Islands isolate P84 |
| KC017956 | - | - | American crow | P85 | Pennsylvania isolate P85 |
| KC017897 | - | - | Northern(hen)harrier | P86 | Spain isolate P86 |
| KC017957 | - | - | Common bullﬁnch | P87 | Belgium isolate P87 |
| KC017862 | - | - | Great tit | P88 | Hungary isolate P88 |
| KC017958 | - | - | Mississippisandhillcrane | P89 | Mississippi isolate P89 |
| KC017916 | - | - | Swainson’sthrush | P90 | Wisconsin isolate P90 |
| KC017917 | - | - | Humboldt penguin | P92 | Wisconsin isolate P92 |
| KC017878 | - | - | Hawai’I amakihi | P93 | Hawaii isolate P93 |
| KC017882 | - | - | Apapane | P100 | Hawaii isolate P100 |
| KC017884 | - | - | Canary | P101 | Chile isolate P101 |
| KC017921 | - | - | Common grackle | P102 | Texas isolate P102 |
| KC017954 | - | - | European starling | P104 | Maryland isolate P104 |
| KC017864 | - | - | Great bustard | P107 | Hungary isolate P107 |
| KC017865 | - | - | Common hill myna | P108 | Hungary isolate P108 |
| KC017923 | - | - | American robin | P109 | Texas isolate P109 |
| KC017925 | - | - | Yellow-crowned amazon  | P110 | NewYork isolate P110 |