

Memo No. 2018-048
Date: 08-Nov-2018
Memo To: Clients
Re: **New Tests – Avian Antigen-Specific IgG**

Refer to website for further details – these assays will be available after November 19, 2018

Hypersensitivity Pneumonitis (HP) is a complex respiratory syndrome that can result from exposure to a variety of causal agents including avian organic material such as droppings and feathers. Definitive diagnosis remains a clinical challenge and generally involves characteristic clinical symptoms and the presence of antigen-specific IgG antibodies¹⁻³.

Assay of nine avian antigen-specific IgG antibodies was recently discontinued following difficulty in securing suitable reagent materials. The discontinued assays utilized counter-immunoelectrophoresis (CIEP), a qualitative assay with detection of antibodies based on formation of a precipitate (hence “avian precipitins”). Despite clinical utility, qualitative CIEP assays lack sensitivity and specificity and require extensive oversight to ensure quality. Detection and quantitation of antigen-specific IgG antibodies by Fluorescence enzyme immunoassay (FEIA) is analytically superior to various precipitin methods¹⁻³.

Effective November 19, 2018 four new FEIA avian antigen-specific IgG assays will be introduced:

- Budgie IgG Antibodies – detects antibodies to Budgie serum proteins, feathers and droppings
- Pigeon IgG Antibodies – detects antibodies to Pigeon serum proteins, feathers and droppings
- Parrot IgG Antibodies – detects antibodies to Parrot serum proteins, feathers and droppings
- Avian IgG Antibodies Panel – detects antibodies to Budgie *and* Pigeon serum proteins, feathers and droppings

References

1. Hoeyveld, E.V., et al. Quantification of IgG Antibodies to *Aspergillus fumigatus* and Pigeon antigens by ImmunoCap Technology: An Alternative to the Precipitation Technique? *Clinical Chemistry* 52:9 1785-1793, 2006.
2. Lopata, A. L., et al. Qualitative and Quantitative Evaluation of Bird-Specific IgG Antibodies. *International Archives of Allergy and Immunology*, 2004; 134:173-178.
3. Khan, S., et al. Quantitation of Avian IgG Antibodies with Clinico-radiological Tests in the Diagnosis of Bird Fancier’s Hypersensitivity Pneumonitis. *The Pulmo-Face*, Volume XV Number 2, November 2015.

If you have further questions, please contact Client Care at (416) 422-3000 Ext. 300 or info@ICLabs.ca

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