Supplemental Materials

Clumping morphology influences virulence uncoupled from echinocandin resistance in

*Candida glabrata*

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Supplementary Table S1 and S2
**Table S1.** Summary of MIC values of two pair of clinical *C. glabrata* strains for 8 common antifungals (micafungin (MFG), caspofungin (CAS), 5-flucytosine (5-FC), amphotericin B (AMB), fluconazole (FLU), itraconazole (ITR), posaconazole (POS), and voriconazole (VOR))

| Strain | Patient | FKS-Genotype   | MIC (µg/ml) | MFG | CAS | 5-FC | AMB | FLU | ITR | POS | VOR |
|--------|---------|----------------|-------------|-----|-----|------|-----|-----|-----|-----|-----|
| A1     | A       | WT             |             | 0.03| 0.12| 0.06 | 0.25| 64  | 1   | 8   | 1   |
| A2     | A       | FKS2-S663P     |             | 4   | 8   | 0.06 | 0.5 | 64  | 16  | 8   | 2   |
| B1     | B       | WT             |             | 0.03| 0.25| 0.06 | 0.5 | 16  | 0.5 | 1   | 0.25|
| B2     | B       | FKS2-S663P     |             | 4   | 8   | 0.06 | 0.5 | 16  | 4   | 1   | 0.25|
### Table S2. Summary of single nucleotide polymorphisms (SNPs) analysis of two genes ACE2 (CAGL0M04323g) and CHS2 (GAGL0I04818g) between two sets of strains (A1 and A2 vs. B1 and B2). The sequences of two sets of strains were aligned to that of the reference *C. glabrata* CBS138.

| Gene          | Strain | Protein effect | Position in CDS codon | Position in CDS | Codon change | Amino acid change |
|---------------|--------|----------------|-----------------------|-----------------|--------------|-------------------|
| ACE2 (CAGL0M04323g) | B1     | Substitution   | 453                   | 1359            | GAG -> GAT   | E -> D            |
|               | B2     | Substitution   | 453                   | 1359            | GAG -> GAT   | E -> D            |
| CHS2 (GAGL0I04818g) | A1     | Substitution   | 659                   | 1975            | TTG -> ATG   | L -> M            |
|               | A2     | Substitution   | 659                   | 1975            | TTG -> ATG   | L -> M            |
|               | B1     | Substitution   | 174                   | 520             | CAT -> AAT   | H -> N            |
|               | B2     | Substitution   | 174                   | 520             | CAT -> AAT   | H -> N            |