

## Supporting Information for

### Review

## Targeting histone deacetylases for cancer therapy: Trends and challenges

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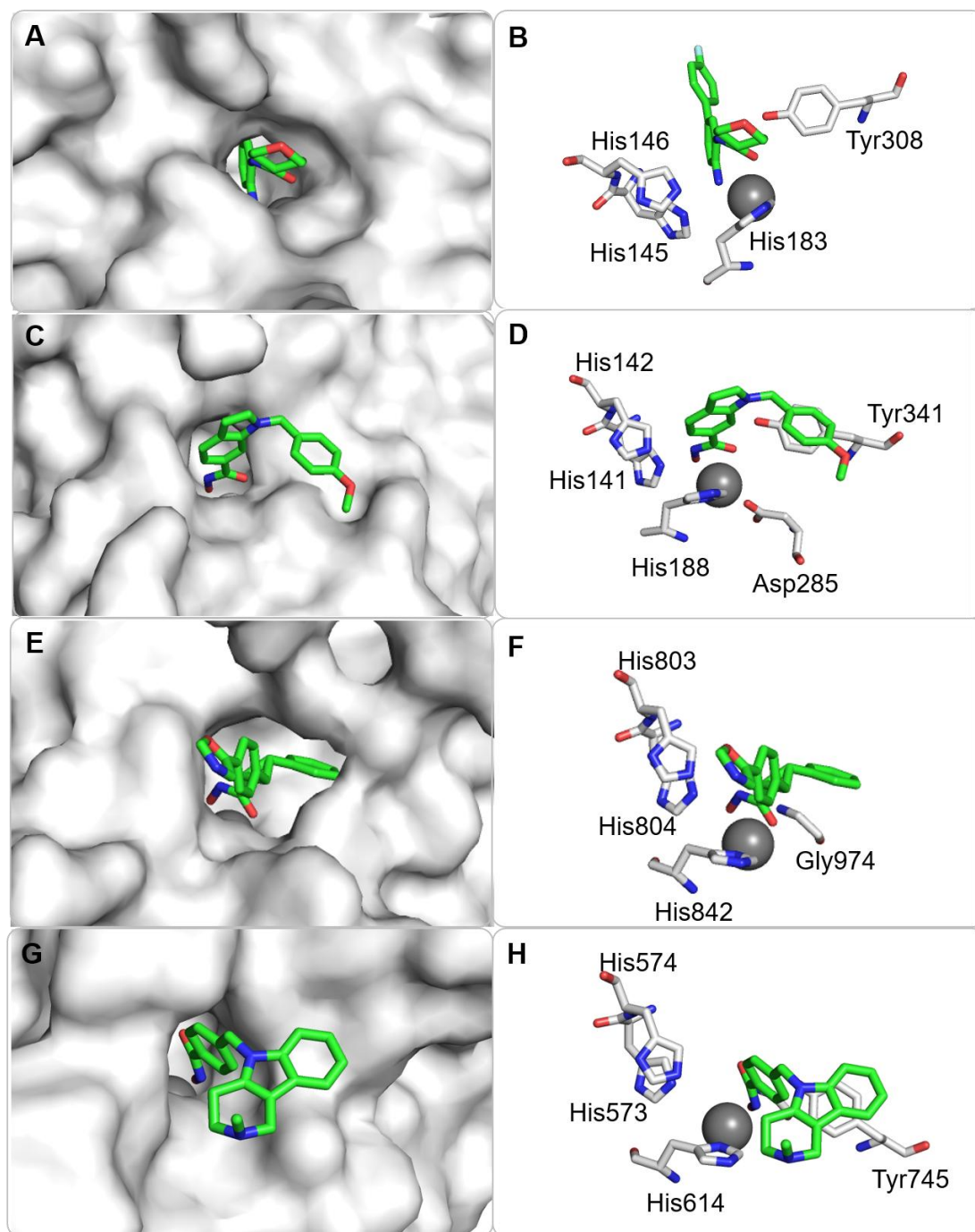
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**Table S1** Drugs in combination with approved HDACi in clinical trials

HDACi	Combination Drug <sup>a</sup>
Vorinostat	Alisertib, Alvocidib, Anastrozole, Azacytidine, Bevacizumab, Bortezomib, Busulfan, Capecitabine, Carboplatin, Carfilzomib, Carmustine, Ceritinib, Cisplatin, Clofarabine, Cobomarsen, Curcumin, Cyclophosphamide, Cytarabine, Cyclosporine, Dasatinib, Decitabine, Dexamethasone, Disulfiram, Docetaxel, Doxil, Doxorubicin, Eltrombopag, Erlotinib, Etoposide, Everolimus, Filgrastim, Fludarabine, Fluorouracil, Gefitinib, Gemcitabine, Gemtuzumab, Hydroxychloroquine, Idarubicin, Ifosfamide, Irinotecan, Ixabepilone, Isotretinoin, Lenalidomide, Letrozole, Leucovorin calcium, Liposomal Lapatinib, Maraviroc, Marizomib, Melphalan, Methotrexate, Mitoxantrone, Mycophenolate, Niacinamide, Olaparib, Oxaliplatin, Ozogamicin, Paclitaxel, Pazopanib, Pegylated, Pembrolizumab, Pemetrexed, Radiation Therapy, Prednisone, Regorafenib, Rituximab, Sirolimus, Sorafenib, Tacrolimus, Tamoxifen, Temsirolimus Ch14.18 Monoclonal Antibody, Temozolomide, Topotecan, Trastuzumab, Ustekinumab, Vinorelbine, Vincristine, Zolanza.
Romidepsin	5-azacitidine, Abraxane, Alisertib, Alvocidib, Antiretrovirals, Bortezomib, Brentuximab, Busulfan, Carfilzomib, Chidamide, Cisplatin, Copanlisib, Decitabine, Dexamethasone, Doxil, Doxorubicin, Durvalumab, Duvelisib, Etoposide, Fludarabine, Gemcitabine, Ifosfamide, Ketoconazole, Lenalidomide, Nivolumab, Oxaliplatin, Parsaclisib, Pomalidomide, Pralatrexate, Rifampin, Sintilimab, Xazomib, Tenalisib, Volasertib, Venetoclax.
Belinostat	Azacitidine, Azacytidine, Atazanavir, Bevacizumab, Bortezomib, Busulfan, Caphosol, Carfilzomib, Carboplatin, Dexamethasone, Doxorubicin, Epoetin, Erlotinib, Etoposide, Glutamine, Idarubicin, Ifosfamide, Interferon-Alfa-2b, Ipilimumab, Isotretinoin, Mesna, Nivolumab, Paclitaxel, Pevonedistat, Ribociclib, Rituximab, Romidepsin, Sirolimus, Talazoparib, Tanespimycin, Volasertib, Warfarin, Zidovudine.
Panobinostat	Abemaciclib, Abiraterone, Afatinib, Bevacizumab, Bicalutamide, Bortezomib, Carfilzomib, Capecitabine, Carboplatin, Cisplatin, Cytarabine, Daratumumab, Daunorubicin, Decitabine, Dexamethasone, Epirubicin, Etoposide, Everolimus, Fluorouracil, Gemcitabine, Ifosfamide, Ipilimumab, Lapatinib, Lenalidomide, Letrozole, Marizomib, Melphalan, Methylprednisolone, Palifermin, Pemetrexed, Rituximab, Ruxolitinib, Sorafenib, Temozolomide, Thalidomide, Trastuzumab, Velcade.
Chidamide	Adriacin, Afatinib, Anti-PD-1 antibody+Peg-Asparaginase, Azacitidine, Camrelizumab, TCR-T cell, Carboplatin, Chiauranib, Cisplatin, Crizotinib, Cyclophosphamide, Cyclosporine A, Dasatinib, Decitabine, Dexamethasone, Doxorubicin, Envafoimab, Epirubicin, Etoposide, Exemestane, Fulvestrant, Gemcitabine, Lenalidomide, Oxaliplatin, Paclitaxel, Prednisone, Rituximab, Sintilimab, Tislelizumab, Tofacitinib, Vincristine, Vinorelbine.

<sup>a</sup>Data was obtained from [www.clinicaltrials.gov](http://www.clinicaltrials.gov).



**Figure S1** (A, B) Crystal structure of BRD4884 bound to HDAC2 (PDB ID: 5IWG); (C, D) Crystal structure of HDAC8 with PCI34051 (PDB ID: 6HQY); (E, F) Crystal structure of HDAC4 complexed with compound 27 (PDB ID: 4CBY); (G, H) Crystal structure of HDAC6 with Tubastatin A (PDB ID: 6THV).